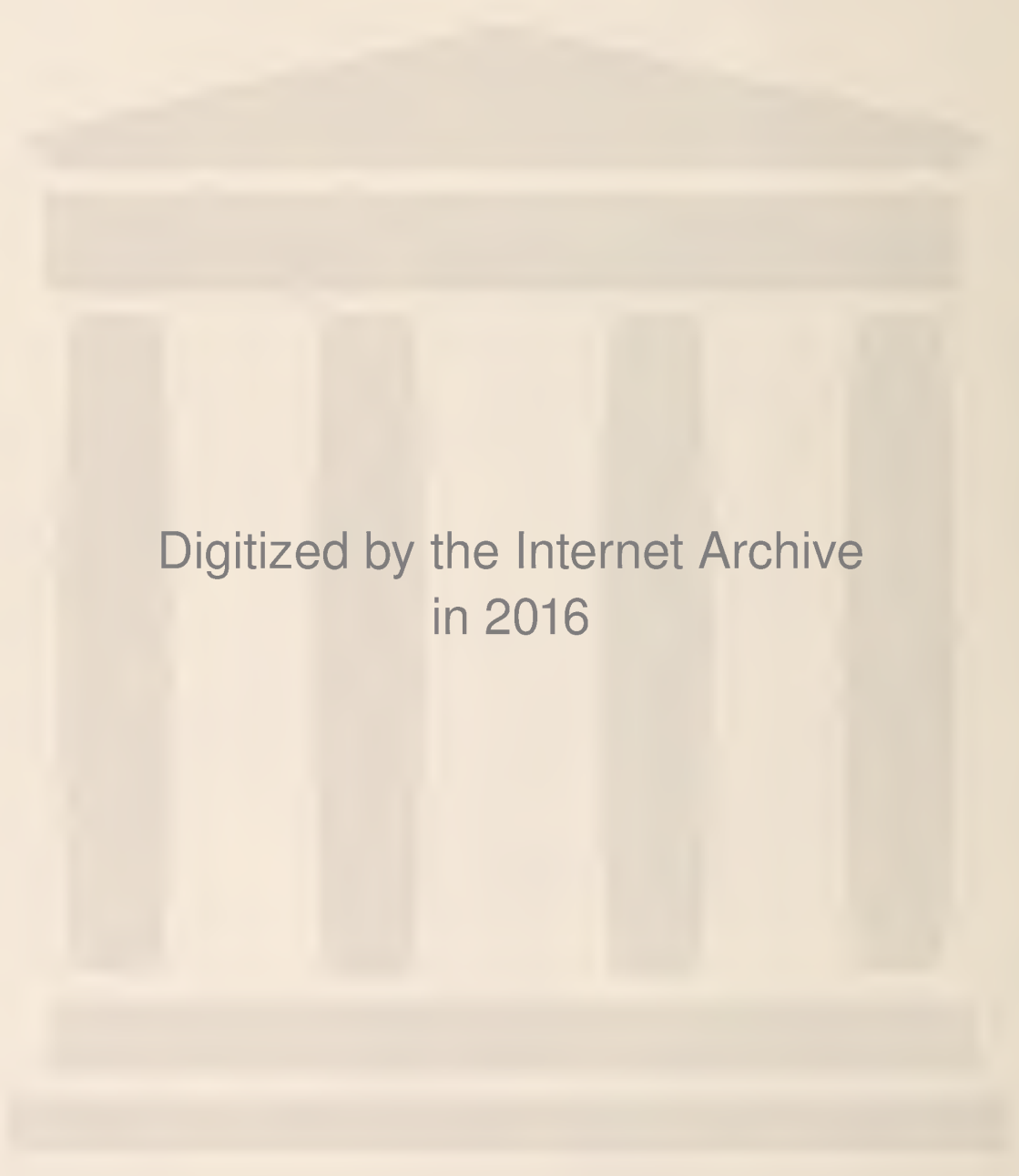


The New York
Academy of Medicine



*Gift from the
Publisher*



Digitized by the Internet Archive
in 2016

<https://archive.org/details/journalofmississ29unse>



LIBRARY
APR 18 1989
NEW YORK ACADEMY
OF MEDICINE

JOURNAL

OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION

JANUARY

1988



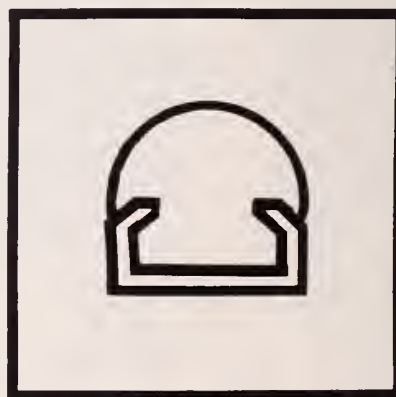
SPECIAL ISSUE

MISSISSIPPI DIAGNOSTIC IMAGING CENTER

**Magnetic Resonance Imaging
Computed Tomography (CT)
Diagnostic X-Ray**

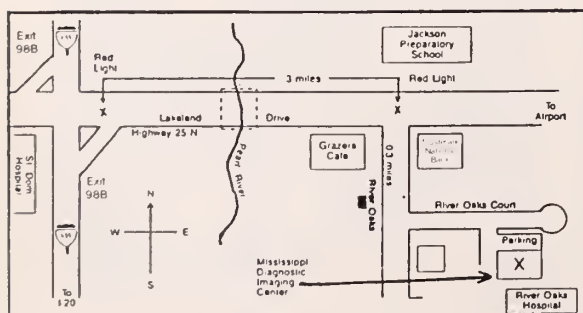
First to Offer MRI in Mississippi

Hours: Monday - Friday by appointment (601) 932-3722
1-800-843-7681



MISSISSIPPI DIAGNOSTIC IMAGING CENTER

103 River Oaks Court
Post Office Box 97269
Flowood, Mississippi 39208
Jackson Area 601-932-3722
Outside Jackson Toll-Free
1-800-843-7681



Out Patient Diagnostic Clinic

JOURNAL

OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION

JANUARY 1988

VOLUME XXIX

NUMBER 1

SCIENTIFIC

- Transmission of Human Immunodeficiency Virus Infection** 1
Eric A. McVey, III, M.D.
- Incidence of AIDS and Prevalence of HIV in Mississippi** 3
F. E. Thompson, M.D.
- Testing for HIV Infection** 8
John D. Wofford, Jr., M.D.
- AIDS in the Workplace** 11
William A. Causey, M.D.
- MSMA Policy Statement on AIDS** 17
- Radiological Seminar CCXLIX: Growing Skull Fractures of Childhood** 16
G. Thomas DesChamps, Jr., M.D. and Bernard I. Blumenthal, M.D.

EDITOR

Myron W. Lockey, M.D.

EDITOR EMERITUS

W. Moncure Dabney, M.D.

ASSOCIATE EDITORS

Arthur A. Derrick, Jr., M.D.

Joseph E. Johnston, M.D.

MANAGING EDITOR

Patsy Silver

PUBLICATIONS COMMITTEE

Richard C. Miller, M.D.,

Chairman

George H. Martin, M.D.

William J. Gibson, M.D.

and the editors

THE ASSOCIATION

W. Lamar Weems, M.D.

President

David R. Steckler, M.D.

President-Elect

Don Q. Mitchell, M.D.

Secretary-Treasurer

James C. Waites, M.D.

Speaker

H. Vann Craig, M.D.

Vice Speaker

Charles L. Mathews

Executive Director

EDITORIAL

- AIDS Crisis Challenges Medical Profession** 19
Myron W. Lockey, M.D.
- Unity** 18
W. Lamar Weems, M.D.

DEPARTMENTS

- Letters** 19
- Organization News** 21
- New Members** 25
- Personals** 30
- Deaths** 33
- Medico-Legal Brief** 33

Copyright© 1988, Mississippi State Medical Association. The views expressed in this publication reflect the opinions of the authors and do not necessarily state the opinions or policies of the Mississippi State Medical Association.

THE JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION (ISSN 0026-6393) is owned and published monthly by the Mississippi State Medical Association, founded 1856, at 735 Riverside Drive, Jackson, Mississippi 39202. Subscription rate, \$25.00 per annum; \$35.00 per annum for foreign subscriptions; \$2.25 per copy, as available. Advertising rates furnished on request. Printed by The Ovid Bell Press, Inc., Fulton, Missouri. Second-class postage paid at Jackson, Mississippi, and at additional mailing offices. POSTMASTER: Send address changes to Mississippi State Medical Association, P.O. Box 5229, Jackson, Mississippi 39216.

Your confidence moves us. Again.

This year, more Mississippi doctors insured with us than with any other firm. Your confidence moves us . . . in more ways than one.

Growth through stability. Since we wrote our first policy in November of 1977, Medical Assurance Company has experienced steady growth and our membership is constantly increasing. The reason that more and more physicians are turning to us is simple: They know that they are receiving the most cost effective coverage backed by a financially sound company.

At Medical Assurance Company, savings and financial strength are provided by a program of sound investments and underwriting guidelines. Our staff is made up of experienced insurance professionals. And all claims are

reviewed by a panel of medical experts, so you can rest assured that your needs are understood.

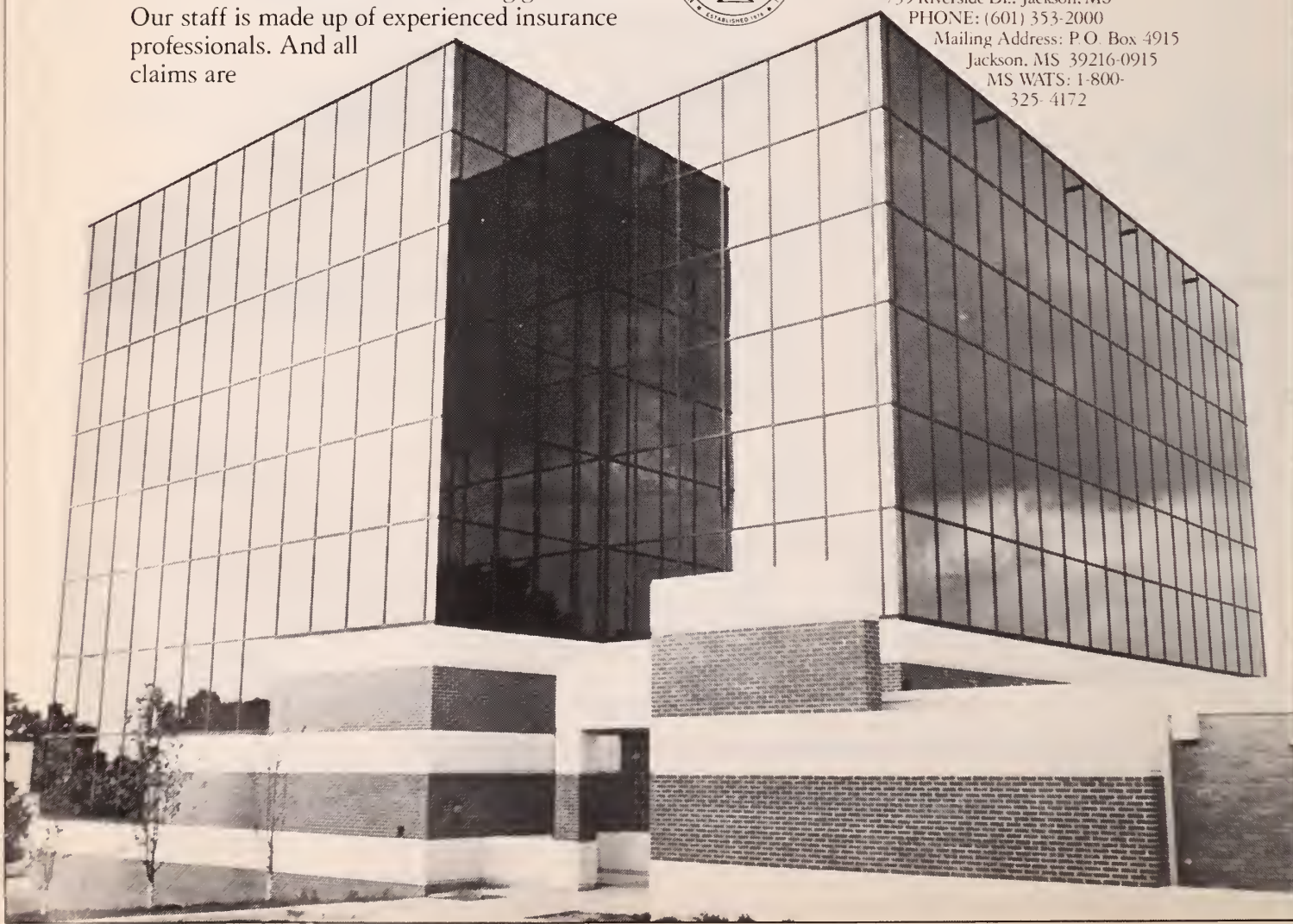
A new location. To house a larger staff and to provide even better service, we have moved back to the State Medical Association Building, this time occupying an entire floor.

For answers to any questions you might have regarding medical professional liability insurance, visit us in our new offices on Riverside Drive, or call us anytime.



Medical Assurance Company of Mississippi

Street Address: Suite 301
735 Riverside Dr., Jackson, MS
PHONE: (601) 353-2000
Mailing Address: P.O. Box 4915
Jackson, MS 39216-0915
MS WATS: 1-800-
325-4172



NEWSLETTER

January 1988

Dear Doctor:

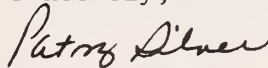
MSMA members are urged to attend a Forum on Tort Reform on Wednesday, January 20, beginning at 2:00 p.m. The session will conclude with a Legislative Reception which will provide an opportunity for you to discuss with your legislators the need for tort reform legislation. Call MSMA to register for this very important meeting, which is sponsored by several organizations, including MSMA and the Mississippi Hospital Association.

MSMA is participating in a coalition of business and professional groups called "Mississippians for Civil Justice Reform." The group will seek tort reform legislation in the 1988 legislative session. In recent weeks coalition members reported good response to a series of local meetings with legislators.

Physicians in private practice or academic medicine are eligible for the Jefferson F. Hollingsworth, M.D., Memorial Clinical Research Award. Established by the American Heart Association in Mississippi, the grant honors the memory and work of the late Dr. Hollingsworth, who served as president of the Mississippi Affiliate in 1985-86 and who encouraged clinicians to participate in cardiovascular research. For information, contact the American Heart Association, Mississippi Affiliate, P.O. Box 16808, Jackson, MS 39236. Deadline for applications is May 1.

In a unique joint editorial, the editors of JAMA and the American Bar Association Journal urge doctors and lawyers, "as a matter of ethics and good faith," to voluntarily contribute at least 50 hours of professional time to work with the poor. They note that many doctors and lawyers do contribute free time to the poor, but feel more should be done. "Doctors and lawyers today have tended to become overly concerned with their professional incomes and practice efficiencies, but they must not forget their higher duty," they say. "Many members of our professions have always cared for the poor who need legal or medical help. But...there is abundant evidence of unmet needs."

Sincerely,



Patsy Silver
Managing Editor

What Every Physician's Spouse Should Know

A series of booklets on topics of special interest to medical families published by the American Medical Association Auxiliary



Professional Liability

- Scope of problem ■ Legal process
- Coping

Impairment

- Causes ■ Impact on family
- Getting help

Survival Tips for Resident Physician/Medical Student Spouses

- Marriage in the training years
- Stress ■ Finances

Marriage

- Who players are ■ Special concerns ■ Stages of medical career

Retirement and Estate Planning

- Making retirement years fulfilling
- Providing for the family's future

MAIL ORDER FORM TO:
American Medical Association Auxiliary, Inc.
535 N. Dearborn St., Chicago, IL 60610

Please send me the following publications in the series on *What Every Physician's Spouse Should Know*:

- # of copies _____
- Impairment _____
- Professional Liability _____
- Survival Tips for Resident Physician/Medical Student Spouses _____
- Marriage _____
- Retirement and Estate Planning _____

(AVAILABLE FEB. 1, 1987)

Each booklet is \$3 per copy for AMA Auxiliary members and \$5 per copy for non-members

Enclosed is my check in the amount of \$_____ made payable to the AMA Auxiliary. Check must accompany order form.

NAME _____

ADDRESS _____

CITY/STATE/ZIP _____

TELEPHONE () _____

CARAFATE®

(sucralfate)

BRIEF SUMMARY

CONTRAINDICATIONS

There are no known contraindications to the use of sucralfate.

PRECAUTIONS

Duodenal ulcer is a chronic, recurrent disease. While short-term treatment with sucralfate can result in complete healing of the ulcer, a successful course of treatment with sucralfate should not be expected to alter the post-healing frequency or severity of duodenal ulceration.

Drug Interactions: Animal studies have shown that the simultaneous administration of CARAFATE with tetracycline, phenytoin, or cimetidine will result in a statistically significant reduction in the bioavailability of these agents. This interaction appears to be nonsystemic in origin, presumably resulting from these agents being bound by CARAFATE in the gastrointestinal tract. The bioavailability of these agents may be restored simply by separating the administration of these agents from that of CARAFATE by two hours. The clinical significance of these animal studies is yet to be defined.

Carcinogenesis, Mutagenesis, Impairment of Fertility: No evidence of drug-related tumorigenicity was found in chronic oral toxicity studies of 24 months' duration conducted in mice and rats at doses up to 1 gm/kg (12 times the human dose). A reproduction study in rats at doses up to 38 times the human dose did not reveal any indication of fertility impairment. Mutagenicity studies have not been conducted.

Pregnancy: Pregnancy Category B. Teratogenicity studies have been performed in mice, rats, and rabbits at doses up to 50 times the human dose and have revealed no evidence of harm to the fetus due to sucralfate. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

Nursing Mothers: It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when sucralfate is administered to a nursing woman.

Pediatric Use: Safety and effectiveness in children have not been established.

ADVERSE REACTIONS

Adverse reactions to sucralfate in clinical trials were minor and only rarely led to discontinuation of the drug. In studies involving over 2,500 patients, adverse effects were reported in 121 (4.7%). Constipation was the most frequent complaint (2.2%). Other adverse effects, reported in no more than one of every 350 patients, were diarrhea, nausea, gastric discomfort, indigestion, dry mouth, rash, pruritus, back pain, dizziness, sleepiness, and vertigo.

DOSAGE AND ADMINISTRATION

The recommended adult oral dosage for duodenal ulcer is 1 gm four times a day on an empty stomach.

Antacids may be prescribed as needed for relief of pain but should not be taken within one-half hour before or after sucralfate.

While healing with sucralfate may occur during the first week or two, treatment should be continued for 4 to 8 weeks unless healing has been demonstrated by x-ray or endoscopic examination.

HOW SUPPLIED

CARAFATE (sucralfate) 1-gm pink tablets are supplied in bottles of 100 and in Unit Dose Identification Paks of 100. The tablets are embossed with MARION/1712. Issued 3/84

References:

1. Korman MG, Shaw RG, Hansky J, et al: *Gastroenterology* 80:1451-1453, 1981.
2. Korman MG, Hansky J, Merrett AC, et al: *Dig Dis Sci* 27:712-715, 1982.
3. Brandstaetter G, Kratochvil P: *Am J Med* 79(suppl 2C):36-38, 1985.
4. Marks IN, Wright JP, Gilinsky NH, et al: *J Clin Gastroenterol* 8:419-423, 1986.
5. Lam SK, Hui WM, Lau WY, et al: *Gastroenterology* 92:1193-1201, 1987.

Another patient benefit product from

MARION
PHARMACEUTICAL DIVISION
LABORATORIES INC.
KANSAS CITY, MO 64137

Ulcer therapy that won't yield, even to smoking

YIELD



What do you do for duodenal ulcer patients who should stop smoking, but won't? Both cimetidine¹ and ranitidine² have been shown less effective in smokers than nonsmokers.

Choose CARAFATE® (sucralfate/Marion). Two recent studies show Carafate to be as effective in smokers as nonsmokers.^{3,4} A difference further illustrated in a 283-patient study comparing sucralfate to cimetidine⁵:

Ulcer healing rates:
(at four weeks of therapy)⁵

Sucralfate:

All patients 79.4%

Smokers 81.6%*

Cimetidine:

All patients 76.3%

Smokers 62.5%

Carafate has a unique, nonsystemic mode of action that enhances the body's own ulcer healing ability and protects the damaged mucosa from further injury.

When your ulcer patient is a smoker, prescribe the ulcer medication that won't go up in smoke: safe, nonsystemic Carafate.

Nothing works like

CARAFATE®
sucralfate/Marion

Please see adjoining page for references and brief summary of prescribing information.

*Significantly greater than cimetidine smoker group ($P < .05$).

Motrin[®] 800 TABLETS mg

ibuprofen



Extra strength
Convenience
Economy



A Century
of Caring
1886-1986

Now Available

The Health Policy Agenda for the American People

A Comprehensive Framework for the Future

After five years of collaborative effort, The Health Policy Agenda for the American People (HPA) has issued its Summary and Final Reports recommending policy guidelines for the future of our health care system. This landmark effort establishes a comprehensive, long-term framework for U.S. health policy into the 21st century.

Broad Reaching Recommendations

The HPA Reports contain guiding principles and specific policy recommendations covering a wide subject area:

- supplying, distributing and educating health professionals
- providing technology and facilities
- organizing resources
- communicating health information
- ensuring quality
- paying for services
- preparing for the future through research

A Health Policy Partnership

Representatives of the health professions, insurers, health care institutions, consumer organizations, business groups and the government collaborated to develop recommendations that reflect this broad array of viewpoints. Learn what the HPA has recommended on your behalf... and how it will affect your future.

Order Now

To order your copies of the HPA Summary and Final Reports **call toll-free 1-800-621-8335. In Illinois call collect 312/645-4987.** Or complete and mail the form below with your payment to:
The Health Policy Agenda for the American People
P.O. Box 10946
Chicago, Illinois 60610-0946
Order No. OP-207

Order Form

Please send me _____ copies of the HPA Summary and Final Reports (OP-207) at \$35 for the two volume set.

Subtotal _____
Sales tax (IL, NY residents) _____
Total _____

Name

Address

City State/Zip

Please charge my: ☐ VISA ☐ MASTERCARD

Credit Card Number Expiration Date

Signature Phone

Payment must accompany order. Please allow 4-6 weeks for delivery.
For information on bulk purchases, please call 312/280-7168.

PHYSICIANS, SCHEDULE SOME TIME FOR YOUR COUNTRY.

Many physicians would like to devote some time to their country in a local Army Reserve unit. We know that making a weekend commitment can be difficult for most physicians. So it is practical for the Army Reserve units to be flexible about time. It's worth discussing.

Incidentally, in addition to satisfying your own desire to serve your country, there are exceptional opportunities to do something totally different from a day-to-day routine. Opportunities to study new areas of medicine, meet new people in your specialty, and be a part of one of the world's most advanced medical teams.

Discuss the opportunities with our Army Medical Personnel Counselor.

FOR SURGEONS LOOKING FOR A CHALLENGE.

Your challenge could be the Army Reserve unit near you. It's a unit that requires the services of surgeons.

You may wish to explore the challenge of teaching in a major medical center. You may wish to explore the special challenges of your specialty in triage. Certainly you'll be confronted by challenges very different from your daily routine.

You'll also have an opportunity to participate in a number of programs in which you'll be able to exchange views and information with other surgeons from all over the country.

The Army Reserve understands the time demands on a busy physician, so you can count on us to be totally flexible in making time for you to share your specialty with your country. We'll arrange your training program to work with your practice.

To find out about the benefits of serving with a nearby Army Reserve unit, we recommend you call our Army Medical Personnel Counselor.

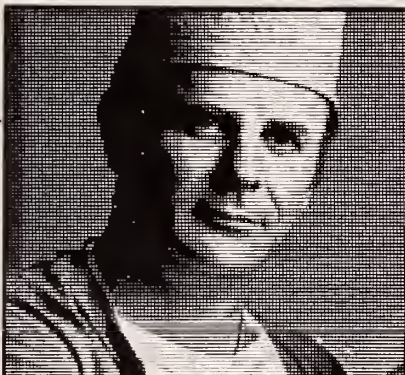
PHYSICIANS, THERE ARE TWO KINDS OF FLEXIBILITY IN THE ARMY RESERVE WE THINK YOU'LL LIKE.

One, time. We know how tough it is for a busy physician to make weekend time commitments. So we offer flexible training programs that allow a physician to share some time with his or her country. We arrange a schedule to suit your requirements.

Two, the opportunity to explore other phases of medicine, to add a different kind of knowledge—the challenge of military health care. It's a flexibility which could prove to be both stimulating and rewarding, with the opportunity to participate in a variety of programs that can put you in contact with medical leaders from all over the country.

See how flexible we can be, call our Army Medical Personnel Counselor.

**ARMY RESERVE.
BE ALL YOU CAN BE.**



HERE'S ONE DOCTOR WHO WON'T PAY HIS MALPRACTICE PREMIUMS THIS YEAR.

The Army covers his premiums. Since he's an Army Physician, there are a lot of worries associated with private practice that he won't have to contend with. Like excessive paperwork, and the overhead costs incurred in running a private practice.

What he will get is a highly challenging, highly rewarding experience. The Army offers varied assignments, chances to specialize, or further your education, and to work with a team of dedicated health care professionals. Plus a generous benefits package.

If you're interested in practicing high quality health care with a minimum of administrative burdens, examine Army medicine. Talk to your local Army Medical Department Counselor for more information.

**ARMY MEDICINE.
BE ALL YOU CAN BE.**

MAJOR OPPORTUNITIES FOR HEALTH PROFESSIONALS.

Army Medicine
Mid-Memphis Tower Bldg.
Suite 702
1407 Union Ave.
Memphis, TN 38104
Call collect: (901) 521-2855

Army Reserve Medicine
255 West Oxmoor Rd.
Room R-105
Birmingham, AL 35209
Call collect: (205) 942-6570



DATELINE

Volunteers Needed For Senior Care Program

Delta and Golden Triangle areas of the state. The program will identify physicians who are willing to provide necessary medical services to persons 65 years of age and over whose incomes are below the poverty level. Physicians in those areas will receive letters soliciting their participation.

Jackson, MS - MSMA, in cooperation with the MS Council on Aging, will begin its "Senior Care Program" in the north

Conference on Impaired Health Professionals

at the Coliseum Ramada Inn. Problems of impairment cut across the spectrum of health professions, and the conference seeks to insure that effective help is available for members of medical, dental, nursing, veterinary and pharmacy professions. For information, contact Nell Rowell, 366-7483.

Jackson, MS - The second statewide Conference on Impaired Professionals will be held in Jackson, January 29-31,

Casemanager System for Medicaid Endorsed by Board

program. The system was recommended by the MSMA Council on Medical Service. Plans call for the program to be implemented on a pilot basis in selected areas of the state and to apply to patients seeking services of physicians in family practice, internal medicine, pediatrics and ob-gyn.

Jackson, MS - The MSMA Board of Trustees has endorsed a casemanager system for the state's Medicaid

Facility Cited for Failure To Protect Workers from AIDS

failing to adequately protect workers against infection from blood-borne diseases such as AIDS. OSHA issued two citations against the facility for not providing employees with protective gloves and not labeling trash bags containing potentially contaminated blood waste products.

Monroe, LA - A blood donor facility in Monroe has become the first to be cited by the federal government for

Blood Cell Abnormality May Be Clue to Alzheimer's

of an abnormal blood cell may indicate genetic vulnerability to Alzheimer's disease. They also believe the platelet membrane abnormality may indicate at what age and with what speed the disease will strike. The abnormality was 3.2 to 11.5 times higher in close relatives of Alzheimer's patients.

Chicago, IL - Researchers at the University of Pittsburgh report in Science Magazine that the presence



“When I realized my chances of becoming disabled by age 65 were *three times greater* than the chances of death . . .

I compared disability insurance plans. And I decided that my MSMA-endorsed disability insurance plan

SERVES ME BEST!

It's not group insurance, but an individually-owned policy which is *non-cancellable* and *guaranteed renewable*.”

If you're a member of the Mississippi State Medical Association you may be eligible for this outstanding professional disability plan at *discounted premiums*.

- Non-cancellable, guaranteed renewable
- Medical specialty protection
- Presumptive loss provision
- Indexing of prior earnings
- Waiver of premium
- Cost of living rider
- Future disability insurance option
- Lifetime accident and sickness rider
- Total and residual disability protection

Offered by Paul Revere Insurance Company to MSMA members through its exclusive representatives, Professional Disability Specialists.

Jon B. Wimbish, Disability Specialist

1501 Lakeland Drive, Suite 200

Jackson, MS 39216

Telephone 362-9800

Counsel to Authors

THE JOURNAL welcomes manuscripts which should be submitted to the Editors at 735 Riverside Drive, Jackson, MS 39216, in original and at least one duplicate copy. They must be typewritten double spaced on 8½ by 11-inch white paper. **Brief manuscripts (about 2,500 words or 8 pages) will be given preference over longer articles.**

The author is responsible for all statements made in his work, including changes made by the manuscript editor. Manuscripts are received with the understanding that they are not under simultaneous consideration by any other publication and have not been previously published. All manuscripts will be acknowledged, and while those rejected are generally returned to the author, the JOURNAL is not responsible in event of loss. Manuscripts accepted for publication become the property of the JOURNAL and are copyrighted by the association when published. They may not be published elsewhere without written release and permission from both the JOURNAL and the author.

All copy must be double spaced, including legends, footnotes, and references. Generous margins at the top, bottom, and on both sides of the page should be allowed. Each page after the title page should be consecutively numbered and carry a running head identifying the paper and author.

Titles should be short, specific, and clear. Ordinarily, a title should not exceed 80 characters, including punctuation.

References should be limited to a maximum of 10. If there are more than 10, the references will be omitted and a notation made to write the author for a complete list. Textbooks, personal communications, and unpublished data may not be cited as references. References must include names of authors, complete title cited, name of journal or book spelled out or abbreviated according to the *Index Medicus*, volume number, first and last page numbers, month, date (if published more frequently than monthly), and year. References should be arranged according to order listed in the text and must be numbered consecutively.

Manuscripts accepted for publication are subject to copy editing. Authors will receive galley proof prior to publication. Galley proof is only for correction of errors, and text changes

may not be made. The galley proof should be returned by the author within 48 hours from receipt, and no further changes may be made.

Illustrations consist of all material which cannot be set into type such as photographs, line drawings, graphs, charts, and tracings. Illustrations should be submitted separately from text copy. Figures and drawings should be professionally prepared with black ink on white paper. Photographs should be of high resolution, unmounted, untrimmed, glossy prints. Each must be clearly identified. No charges are made to authors for up to four illustration engravings. More are not permitted unless voted on by two editors and extra costs must be absorbed by the author.

Illustrations must be numbered and cited in the text. Legends, not exceeding 40 words and preferably shorter, must accompany each illustration, typed double spaced on separate sheets. The following information should appear on a gummed label affixed to the back of each illustration: Figure number, manuscript title, author's name, and arrow indicating top of the illustration.

In photographs in which there is any possibility of personal identification, an acceptable legal release must accompany the material.

A thesis summary of 75 to 100 words must accompany each manuscript.

Reprints may be obtained at cost plus shipping charges from the association and **should be ordered prior to publication.** The JOURNAL reserves the right to decline any manuscript. Authors should avoid placing subheads in the text, and the Editors reserve the prerogative of writing and inserting subheads according to JOURNAL style. — *The Editors.*

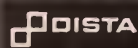
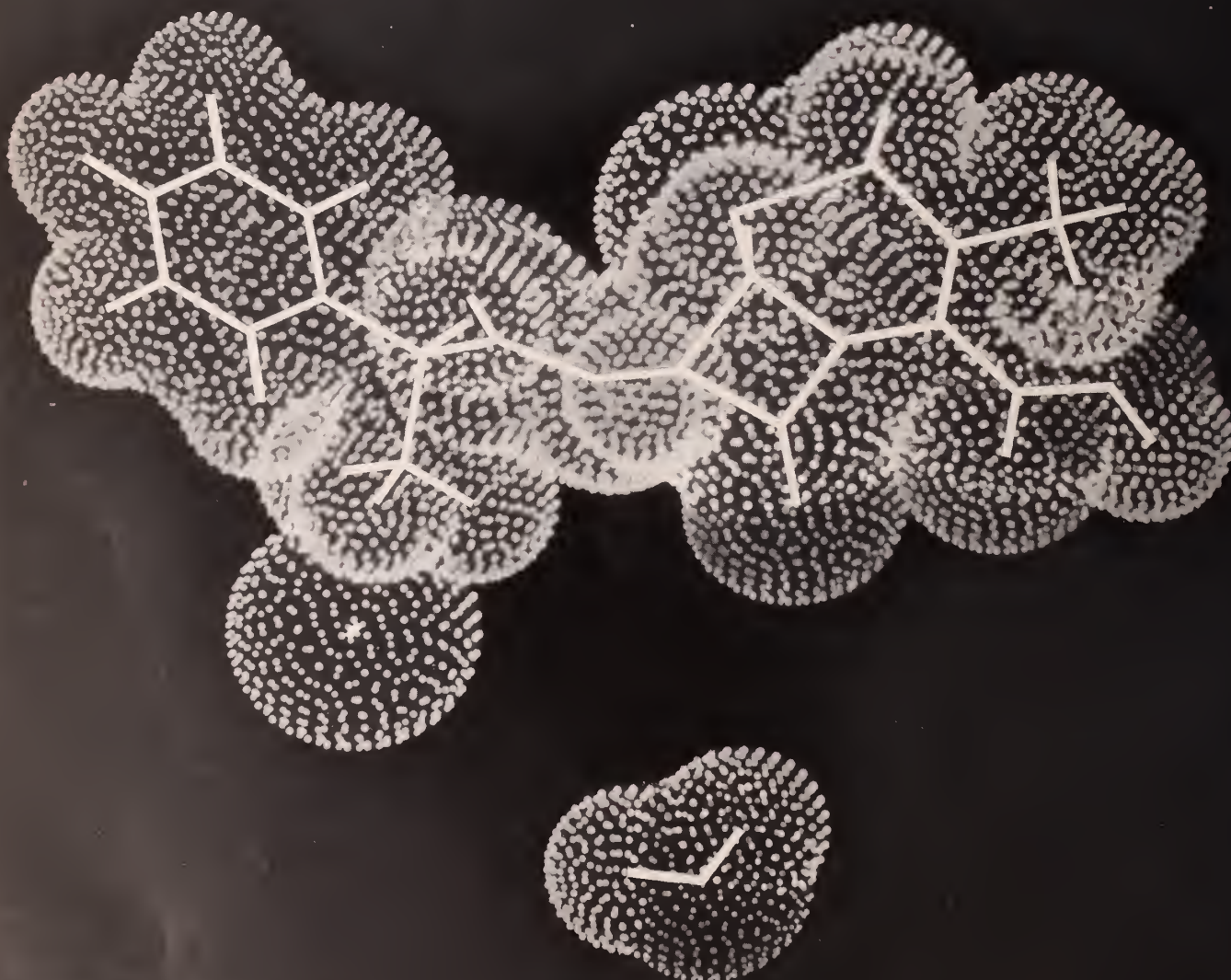
In addition, in view of *The Copyright Revision Act of 1976*, effective Jan. 1, 1978, transmittal letters to the editor should contain the following language: "In consideration of the Mississippi State Medical Association's taking action in reviewing and editing my submission, the author(s) undersigned hereby transfers, assigns, or otherwise conveys all copyright ownership to the MSMA in the event that such work is published by the MSMA." We regret that transmittal letters not containing the foregoing language signed by all authors of the submission will necessitate delay in review of the manuscript. — *The Editors.*

ANNOUNCING

NEW

KEFTAB™

cephalexin hydrochloride monohydrate



Dista Products Company
Division of Eli Lilly and Company
Indianapolis, Indiana 46285
Mfd by Eli Lilly Industries, Inc
Carolina, Puerto Rico 00630

© 1987, DISTA PRODUCTS COMPANY KX-0008-B-849336

Computer-generated molecular
structure of cephalexin
hydrochloride monohydrate

Convenient 500-mg b.i.d. dosage and demonstrated effectiveness for treatment of:

- skin and skin structure infections*
- uncomplicated cystitis†
- pharyngitis‡

- New hydrochloride salt form of cephalexin—requires no conversion in the stomach before absorption
- Well-tolerated therapy
- May be taken without regard to meals



For other indicated infections, 250-mg tablets available for q.i.d. dosage

Priced less than Keflex® (cephalexin)

Keftab is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-sensitive patients.

Penicillin is the drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever.

*Due to susceptible strains of *Staphylococcus aureus* and/or β -hemolytic streptococci.

†Due to susceptible strains of *Escherichia coli*, *Proteus mirabilis*, and *Klebsiella* sp.

‡Due to susceptible strains of group A β -hemolytic streptococci.

KEFTAB™

(cephalexin hydrochloride monohydrate)

Summary: Consult the package literature for prescribing information.

Indications and Usage:

Respiratory tract infections caused by susceptible strains of *Streptococcus pneumoniae* and group A β -hemolytic streptococci.

Skin and skin structure infections caused by susceptible strains of *Staphylococcus aureus* and/or β -hemolytic streptococci.

Bone infections caused by susceptible strains of *S aureus* and/or *Proteus mirabilis*.

Genitourinary tract infections, including acute prostatitis, caused by susceptible strains of *Escherichia coli*, *P mirabilis*, and *Klebsiella* sp.

Contraindication: Known allergy to cephalosporins.

Warnings: KEFTAB SHOULD BE ADMINISTERED CAUTIOUSLY TO PENICILLIN-SENSITIVE PATIENTS. PENICILLINS AND CEPHALOSPORINS SHOW PARTIAL CROSS-ALLERGENICITY. POSSIBLE REACTIONS INCLUDE ANAPHYLAXIS.

Administer cautiously to allergic patients.

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics. It must be considered in differential diagnosis of antibiotic-associated diarrhea. Colon flora is altered by broad-spectrum antibiotic treatment, possibly resulting in antibiotic-associated colitis.

Precautions:

- Discontinue Keftab in the event of allergic reactions to it.
- Prolonged use may result in overgrowth of nonsusceptible organisms.
- Positive direct Coombs' tests have been reported during treatment with cephalosporins.
- Keftab should be administered cautiously in the presence of markedly impaired renal function. Although dosage adjustments in moderate to severe renal impairment are usually not required, careful clinical observation and laboratory studies should be made.
- Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.
- Safety and effectiveness have not been determined in pregnancy and lactation. Cephalexin is excreted in mother's milk. Exercise caution in prescribing Keftab for these patients.
- Safety and effectiveness in children have not been established.

Adverse Reactions:

- *Gastrointestinal*, including diarrhea and, rarely, nausea and vomiting. Transient hepatitis and cholestatic jaundice have been reported rarely.
- *Hypersensitivity* in the form of rash, urticaria, angioedema, and, rarely, erythema multiforme, Stevens-Johnson syndrome, or toxic epidermal necrolysis.
- *Anaphylaxis* has been reported.
- *Other reactions* have included genital/anal pruritus, genital moniliasis, vaginitis/vaginal discharge, dizziness, fatigue, headache, eosinophilia, neutropenia, and thrombocytopenia; reversible interstitial nephritis has been reported rarely.
- Cephalosporins have been implicated in triggering seizures, particularly in patients with renal impairment.
- *Abnormalities in laboratory test results* included slight elevations in aspartate aminotransferase (AST, SGOT) and alanine aminotransferase (ALT, SGPT). False-positive reactions for glucose in the urine may occur with Benedict's or Fehling's solution and Clinitest® tablets but not with Tes-Tape® (Glucose Enzymatic Test Strip, USP, Lilly).

**You're
a Professional.**

**You need Professional
Health Insurance
Coverage.**

MSMA

Benefit Plan and Trust

MSMA Benefit Plan and Trust is a superior insurance program which fulfills the quality of coverage and affordability that everyone wants.

Sponsored by the Mississippi State Medical Association, the MSMA Benefit Plan and Trust offers life and health benefits to physician members of MSMA, their employees and families.

- \$1,000,000 lifetime benefits.
- Life Coverage up to \$50,000.
- Broad benefits with fair and equitable rates.
- Management by and for physicians.
- Non-profit and administered at lowest possible cost.

For Complete Description of Benefits Write:

MSMA Benefit Plan and Trust

P.O. Box 55509
Jackson, MS 39216

ORIGINAL PAPERS

Seminar on AIDS: Part 1

Transmission of Human Immunodeficiency Virus Infection

ERIC A. MCVEY III, M.D.

Jackson, Mississippi

WE'RE LOOKING forward to a good brisk educational discussion about a subject that is interesting and at times, controversial.

There are various areas of human immunodeficiency virus (HIV) infection that we wish to touch on that are less than a complete discussion of AIDS or HIV infection. What we will discuss has a lot to do with politics, ethics, and to some degree, medicine.

The political aspects of HIV infection are very important and will be touched on briefly, as will the legal aspects — which have come more and more to the forefront as we have learned more about this infection.

I'll talk about transmission and then go on to the rest of the program, which will be introduced then.

As we get better at treating and understanding this problem it has become more of a medical problem. Initially it was purely a medical curiosity. When it became apparent that we could do little medically, HIV infection became more political in nature. Now, as we are developing different types of treatment that if not leading to cures at least lead to temporary remissions, it is becoming a medical problem again.

However, despite the breakthroughs we still are left with education as our primary tool of prevention. I don't want you to leave without taking this home . . . *that without education this disease will*

This article and the three which follow discuss several aspects of Acquired Immune Deficiency Syndrome (AIDS) — transmission, prevalence, testing, and prevention. The articles were transcribed from presentations made at a seminar on AIDS, and thus retain the language and cadence of oral delivery.

continue to spread. It is only with education that risk behavior can be altered.

Granted, there's no information that suggests that education has so far altered risk behavior. In fact, sexually transmitted diseases of other types have been unchanged in the last two to three years, during which time we would have expected to see a dramatic decrease if indeed alteration in high risk behavior had occurred.

Education most appropriately comes from the medical community. We cannot be naysayers. We cannot be alarmists. We have to be the cool heads, the rational, the informed. And we've got to be sensitive. We've got to be the logical group that the public turns to for education. We cannot ignore the issue. We cannot leave the epidemic to be treated by the government or the appointed designees. We can't have AIDS doctors. We can't have AIDS hospitals. We have got to do this within the private sector. We hear government these days telling us about the private sector. Well, we're the private practice of medicine and we have to be an integral part in the management of this epidemic.

Granted, government is going to play a very im-

Presented October 13, 1987, at a meeting of Central Medical Society in Jackson, MS.

Dr. McVey, a specialist in internal medicine and infectious disease, is medical director of Mississippi Baptist Medical Center in Jackson.

portant role, but I think we have to stand tall in trying to be an integral part of that process.

Perhaps on the lighter side is an article that was in a recent *Journal of the American Medical Association*, which emphasized physicians' risks, or physicians' fears, in treating patients. The authors of this article obviously had studied physician behavior in other epidemics and in particular the plague of the 1300's, and found some interesting situations. One was that writer after writer lamented the "avarice and cowardice" of doctors in times of plague. In the 1600's Daniel Defoe, quoted in this same article, said, "Great was the reproach thrown on those physicians who left their patients during the sickness and now they come home again. Nobody cared to employ them. They were called deserters." During the yellow fever epidemic of 1790 in Philadelphia three wealthy physicians fled the city and were the subject of public mockery.

We see today in the *American Medical News* just such stories with perhaps similar endings. It has become difficult for us as physicians to *want* to participate in the care of patients with this potentially contagious disease that is fatal.

There is no doubt that we will hear more and more about the push and pull of public right or public health or public threat of this infection versus the rights of the individual. Employee rights in hospitals are issues in other areas of the nation as well as here at home. These issues need to be addressed, as well as the obligation of employees and physicians to take care of these patients.

We know a lot more about HIV infection than

we did in 1981 when it was described. But one thing that we don't know any more about today than we did then is *transmission* . . . and that is perhaps an oversimplification. Early in 1982 we became confident it was a sexually-transmitted disease; we knew that it could be transmitted through sharing needles or sharing blood products. And later we found out that it could be transmitted vertically, from mother to newborn. There is *no* evidence to date to support that it is transmitted in any other way. It is not transmitted by casual contact; it is *not* transmitted from family member to family member outside those areas I have described. In fact, it is *difficult* to transmit.

The virus is easily killed or inactivated in the environment. It is very difficult to kill the virus in the human body, but in the environment it is not a hardy virus and does not survive for long periods of time.

With this background, I think it's best that we proceed with the rest of the program. I'll now introduce all the panel members. The next presentation will be by Dr. Ed Thompson, who is our state epidemiologist. He is going to tell us where we are and maybe how we got there and where we are going. He will be followed by Dr. John Wofford, who will discuss HIV testing — who to test, when to test — what method to use — how often to test. The final presentation will be by Dr. Bill Causey, who will talk about workplace transmission for the health care worker — how safe is the workplace; how it can be safer. ★★★

1225 North State Street (39202)

Incidence of AIDS and Prevalence of HIV in Mississippi

F. E. THOMPSON, M.D.

Jackson, Mississippi

IN THE UNITED STATES through September 28 there had been a total of 42,354 cases of AIDS reported to the Centers for Disease Control. Through September 30 in Mississippi we had a provisional total of 103 reported cases.

That is a provisional total — 103 cases occurring among residents of Mississippi. As we get completed case reports in on these preliminarily-reported cases, we sometimes find that the person was not really a resident of Mississippi, or did not meet the case definition. So 103 is a tentative but fairly firm number.

In Mississippi as well as in the United States, there are well-defined risk categories for AIDS cases. These, like our knowledge of how the virus is transmitted, have not changed materially since the beginning of the epidemic.

In the United States as a whole, 74% of cases continue to occur among homosexual and bisexual males. Another 16-17% occur among IV drug abusers, and the remainder fall into several small but significant high risk categories. Hemophilia and other coagulation disorder patients, and recipients of blood transfusions account for 3% of the total. Heterosexual cases account for 4% of the total, and the remainder are what is described as "unknown or undetermined." Figure 1 shows the transmission categories for the U.S.

Let me clarify two of these categories. First, heterosexual cases. This is in fact two distinct categories that share a common terminology. Two percent of the total (half of the 4% that are heterosexual cases) are heterosexual partners of members of one of the other high-risk groups — the man whose

female partner uses IV drugs, the female whose male partner is bisexual or who uses IV drugs, the wife of a hemophilia patient, and so on. The other half of this group are immigrants — persons born in Haiti, other Caribbean countries, and east and central Africa where at least to a large extent, the virus is transmitted by heterosexual contact. The Centers for Disease Control calls these heterosexual cases as well, on the assumption that they were transmitted through heterosexual contact and they probably were. The big difference, however, is where these people were born. Only 2% of AIDS cases to date in the United States have occurred among people who probably acquired their disease in the United States through heterosexual contact.

Finally, the "undetermined or unknown" category is literally just that in most cases. Most of this 3% of the total cases are people about whom we have insufficient information to know whether they belong in one of the other risk categories or not. As you might expect, it is difficult for some people to admit to the two major risk factors for AIDS,

United States AIDS Cases
Transmission Category (Adults)
Confirmed Cases Through September, 1987



Source: Centers for Disease Control

Figure 1

Presented October 13, 1987, at a meeting of Central Medical Society in Jackson, MS.

Dr. Thompson is state epidemiologist, Mississippi State Department of Health.

which are strongly disapproved of or outright illegal in many segments of our society, and so what we have in this 3% of unknown or undetermined cases is, for the most part, people who probably did fit one of the other major risk categories, but about whom we simply are never going to know because they, or their survivors, are not going to tell.

In Mississippi the risk categories are similar but not identical. Sixty-seven percent of our cases have occurred among homosexual and bisexual males. IV drug abusers are disproportionately small in their representation in Mississippi. This is largely due to the fact that — as my friends in the drug treatment field commonly tell me — Mississippians simply prefer other routes of administration and would prefer to snort, smoke and swallow their drugs rather than to inject them. We do have IV drug abuse, but it's not as common as the use of such drugs by other routes. The drugs that are primarily involved here, by the way, are amphetamines, narcotics and cocaine.

The Mississippi breakdown is shown in Figure 2. IV drug users make up 16% of the national case-load but only 3% in Mississippi.

Transfusion-associated cases in Mississippi make up 14% of the total, not the 2% that we see nationally. And heterosexual cases constitute a larger proportion of cases in Mississippi, making up 5% of the total. This is more a matter of default, rather than anything else. I think all of us are aware of the fact that although we do have homosexuals and IV drug abusers in Mississippi, the climate in this area — the lifestyle here — is less conducive to people in these categories (or perhaps less conducive to people in these categories *admitting* to being in the categories). In either case we have fewer openly admitted homosexual and openly admitted IV drug abusers, and therefore on a percentage basis (by default) we have a larger percentage of trans-

fusion-associated, heterosexual, and other AIDS cases.

In Mississippi we have a small number of hemophilia-associated cases. Our unknown or undetermined category is larger than its national counterpart. But once again this is largely people about whom we don't have enough information — or, as these are very current statistics, people about whom we have not received the case report back. In any case, this is the risk factor distribution in Mississippi.

It's useful to look at the age distribution of AIDS cases, both in Mississippi and the United States, and also the racial distribution. In Mississippi and the United States, almost half of all cases occur among people between the ages of 30 and 39. A slightly different percentage occurs among people ages 20-29 (21% in the United States as a whole; 35% in Mississippi). In the rest of the country about 21% (one in five) occur in people between the ages of 40-49. Here we had a smaller number of people in this category, but overall, between 80 and 90% of all cases of AIDS — both nationally and in Mississippi — occur in people who were essentially between 20 and 50, not the age group in which we are used to seeing major fatal diseases occur.

As to race, we see in the United States as a whole a skewed distribution, with 61% of the cases occurring among whites, 25% among blacks, and 14% among Hispanics. The percentage of blacks and Hispanics is far in excess of the percentage that these two groups make up of the United States population. We do not see that pattern in Mississippi. We have very few Hispanics in Mississippi and to date, no Hispanic cases. Seventy-two percent of our cases have been white; 28% black. When you contrast this with our approximately 36% black population, we find that there is not a disproportionate share of AIDS in Mississippi among minorities. In fact, it is distributed much as the population as a whole is distributed by race.

Both in Mississippi and the United States, 92% of cases occur among men. It is still a predominately, but not exclusively, male disease.

The geographical distribution of AIDS cases in Mississippi is shown in Figure 3 by public health district. These are the public health districts into which we divide the state administratively. We use them also to report AIDS cases because we are not willing at this point to publish the number of AIDS cases that have occurred in a particular county, let alone a particular town. I come from Copiah County, and if the State Department of Health confirmed today that there had been a case of AIDS in Wesson,

Mississippi AIDS Cases
Transmission Category (Adults)
Confirmed Cases Through September, 1987



Figure 2

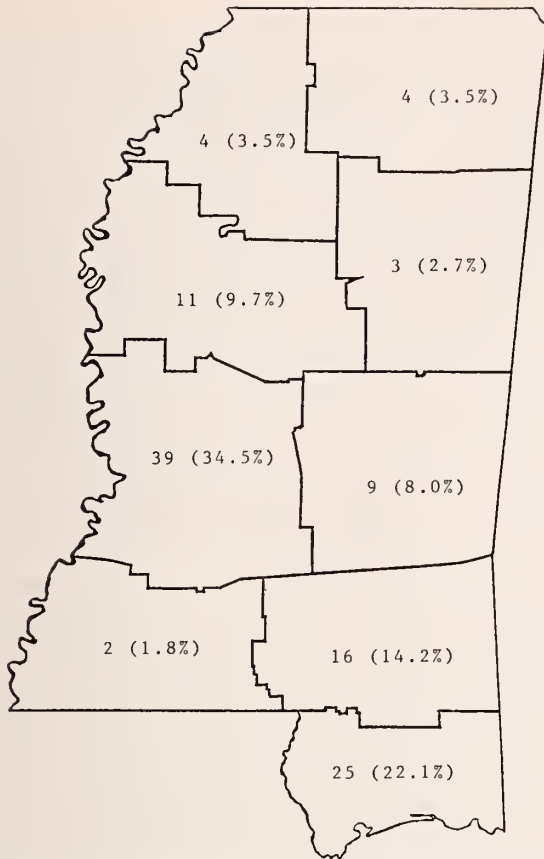


Figure 3. Provisionally reported AIDS cases by public health district. (Reported through September 1987.)

everyone in Wesson would know who they were within a matter of moments. And so, because of the small number of cases and the rural nature and smaller populations of most Mississippi counties, we release our AIDS statistics by district only, so as not to indirectly reveal the identity of a patient. I hope you all appreciate just how carefully we do guard the information that you furnish us about these patients. It would be a lot easier to tell how many cases there were in Tupelo, for instance. But we fight the media over this. We've even been threatened with a lawsuit once. They may find out who these people are, but they're not going to find out from us.

In several districts we have very small numbers of cases, but in several of these we have larger numbers. The central district, which includes the Jackson metropolitan area, accounts for 34.5% of all our cases to date. The second highest percentage of cases, as you might expect because of cultural patterns, is in the Gulf Coast area: 22.1% of all cases. The area around Hattiesburg has had 14%, probably due to a combination of trade routes crossing and the presence of the university there. In these

three districts we have far and away the preponderance of our cases of AIDS. The Delta and the area around Meridian come in a rather distant fourth.

In the United States as a whole, the number of AIDS cases is currently doubling every 12-13 months, which means that with approximately 40,000 cases having been reported through the 5th of this month, this time next year we will have 80,000 cases; the following year 160,000 cases; and the following year well over a quarter of a million cases nationally. Bearing in mind that 58% of all nationally reported cases are now known to be dead and 56% of Mississippi cases are now known to be dead, you see that we will have a lot of people dying during this period of time. And remember, too, that all of these people will require some medical care, much of it rather protracted and most of it quite expensive.

In Mississippi we joined the epidemic about two years after it began, with the first national cases occurring in 1979. We identified in 1983 the first case that occurred in Mississippi, in 1981: an astute person reviewing medical records noticed a case of this strange disease called pneumocystis carinii pneumonia and brought it to our attention. We had a few cases for the first several years and then with minor variations due to small numbers, had a fairly level number for the next two years; then in 1986 we jumped from a cumulative total of just over 20 cases to 38 new cases, bringing the total to about 60. So last year we clearly doubled our number of cases. We expect the same thing to happen again this year, and as you can see, we have already reported 42 cases this year to date and will probably report at least a total of 60 by the end of the year, so that by the end of the year (1987), we will have had a total of over 100 cases in the state. By the end of 1988, we will have had over 200 cases, and by the end of the following year, over 400 cases. Once again, all of these people are going to require a good deal of medical care. Many of them are going to require medical care that is going to run into the thousands of dollars to pay for before they all, inevitably, die.

In terms of HIV infection, as opposed to clinically-diagnosed and recognizable AIDS, our figures are not quite so firm, but still they are rather useful. In the nation as a whole we have rough estimates. In Mississippi we have much better estimates of the prevalence of HIV. It is estimated, based on a number of studies from a number of different routes, that for every one reported AIDS case in a population, there are 50-100 persons infected with HIV at a given time. In rural states — states without

AIDS IN MISSISSIPPI RESIDENTS
1981 - SEPTEMBER, 1987
PROJECTIONS THROUGH DECEMBER, 1988

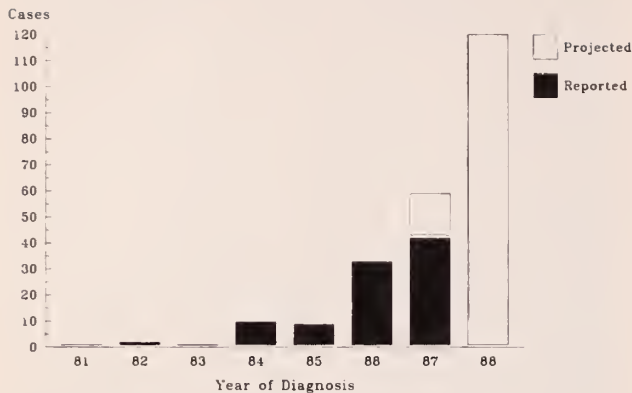


Figure 4

major metropolitan areas — the ratio tends more toward the 100 cases of HIV infection to one AIDS case rather than the 50. In areas that are more metropolitan, the number tends to be more on the order of 50 cases to every one reported case. Nationwide we have 1 to 1.5 million persons carrying the virus right now. In Mississippi, if we just take the numbers that we have right now — roughly 100 cases reported — that somewhere between 5,000 and 10,000 Mississippians already are infected with the virus. An undetermined percentage of these will eventually develop AIDS. Another undetermined percentage will develop AIDS-related illnesses. And probably the majority of these will remain asymptomatic carriers of the virus, capable of spreading it but without clinical illness, for the majority of their lives. (In many cases it will be for the entirety of their lives, up to 20 or 30 or 40 years, until the person is hit by a truck.)

In terms of prevalence among the population, in Mississippi we have several sources of information. We have what I think is the only statewide blood collection agency surveillance system. That gives us some of our best figures on the general population, realizing that blood collection agencies ask donors not to donate if they have a risk factor for AIDS. Currently we are seeing .02% of volunteer blood donors in Mississippi with Western blot-confirmed HIV infection. Among military recruit candidates from Mississippi from October '85 through September '87, there was an HIV positivity rate of .08%. Mississippi is one of a shrinking number of states which requires premarital serological tests for syphilis, a disease that is a heterosexual disease, and in which we are one of the nation's leaders — being third in the nation. We still find enough cases through this route to make it cost effective. The

State Department of Health performs about half of the syphilis serologies that are done in the state each year. We have been taking approximately 200 of the syphilis serologies per month, selected at random, and after the syphilis serologies have been run, removing all patient identifiers from the sample and testing anonymously for HIV infection. We are finding a prevalence among people getting married and coming to the health department for their syphilis serologies, below one-tenth of one percent. In one study done cooperatively with a large metropolitan hospital in the state, blinded testing of 503 consecutive admissions for all reasons found one positive patient. This one positive patient, from available information, was likely to have been hospitalized for AIDS, and thus would not represent unsuspected HIV infection.

In some groups, however, much higher percentages are found. In New York City, IV drug abusers have been studied and found to be up to 90% infected in some groups. Hemophilia patients nationwide (not just in New York or San Francisco, but even in places like Mississippi) are approximately 75-80% already infected with HIV at this point. In San Francisco, one extremely sexually active cohort of gay men was found to have an infection rate by 1985 of 73.3%. That's probably climbed since then. So in high risk groups we see a very extensive spread of the virus.

In Mississippi there are some intermediate risk groups that we've been able to look at. One of the best groups to look at is persons seeking treatment for other venereal diseases. In Jackson, in one of our most active health department STD clinics, in a random and completely anonymous, blinded survey we found just over 2% of all people coming to a health department clinic for STD treatment to be infected with HIV. So in some populations even in Mississippi we see a fairly high rate of infection. Table 1 summarizes findings in studies of low and intermediate-risk Mississippi population groups.

As we have said, we anticipate the number of AIDS cases to double for the next several years, both in the nation and in the state. We don't have firm figures on the rate of increase in the number of persons infected with HIV, but unless behavior patterns change, we expect similarly rapid rates of spread in the major high-risk groups such as homosexual and IV drug abusers, and also slower but steady spread among the heterosexual population. We've seen nationally a slow but steady increase in the rate of infection among heterosexuals and we expect this to be the case in Mississippi as well. Right now the likelihood of an exclusively hetero-

TABLE 1
HIV PREVALENCE IN LOW- AND
INTERMEDIATE-RISK GROUPS
MISSISSIPPI

<i>Group</i>	<i>Number Tested</i>	<i>Number Positive</i>	<i>Percent Western Blot Positive</i>
Volunteer blood donors (Jan. 1-July 31, 1987)	65,785	12	.018%
Premarital blood samples	1,003	1	.1%
Military recruits (Oct. 85-Sept. 87)*	16,950	14	.08%
Hospital admissions	503	1†	.2%
STD Clinic patients	575	13	2.26%

*Data from Department of Defense

†Limited clinical information available from blinded study suggests
this may have been a patient admitted for AIDS

sexual Mississippian (who does not use IV drugs nor have hemophilia) being infected with HIV is extremely low but it is not zero. In the next two to three to four years, that rate is going to increase and the likelihood of a heterosexual with multiple partners encountering the virus in this sort of activity is going to steadily increase over time. This means that we cannot be confident that only those patients in our practices who are homosexual or use IV drugs are likely to be infected with HIV. It is becoming a heterosexual disease. It simply started out as a homosexual disease.

At this point I'll stop with my numbers and turn the program over to whoever is going to talk about more interesting things.

★★★

P.O. Box 1700 (39215)

Testing for HIV Infection

JOHN D. WOFFORD, JR., M.D.

Jackson, Mississippi

I'D LIKE TO TALK about HIV testing. This technique has been extremely important in protecting our blood supply but it also has been extremely devastating.

I'd like to recount the story from a recent issue of "AM News" involving a Dallas pediatrician who found in 1985 that he was HIV positive. He told his roommate at the time. Since then the pediatrician and the roommate have become at odds with each other. The roommate threatened the pediatrician by saying he would tell all the parents of his patients that he was HIV positive. The pediatrician then went to the courts to put a restraining order on him. A great deal of publicity resulted, and the pediatrician's practice of 12 years was gone within three days.

There is a large amount of public sentiment about HIV testing and AIDS, and much fear. This is reflected in a Gallup poll reported in September. The population questioned was in the United States. These are the results of four questions:

1. Should people with the AIDS virus be required to carry a card to that effect? (60% said yes.)
2. Should employers be able to fire workers who contract AIDS? (33% said yes; 43% said no.)
3. Should sufferers be treated with compassion? (7% said no.)
4. Should people with AIDS be allowed to live in the community normally? (29% said no.)

I will speak to HIV antibody testing (ELISA and Western Blot) first and then later will discuss briefly the HIV antigen testing that is now available.

The ELISA test was first licensed in March of 1985 as a screening tool to protect our blood supply. The test has been very good at that function. At least seven manufacturers are licensed in the United States to market this test.

The virus is grown in the cell culture and then the virus is broken apart. The antigens of the virus are then plated in a microtiter well (see Figure 1). Then the patient's serum is put in this microtiter well in serial dilutions (see Figure 2). The antibody in the serum to the HIV antigen then attaches to that antigen. The serum sample is washed away and then a marker antibody to the IGG (anti-IGG antibody) which has an enzyme attached to it is put into the well (see Figure 3). It then attaches to this complex (see Figure 4). After washing, substrate is put into the well. The substrate and enzyme interact and produce another chemical which can be detected by a color change. The cutoff point for the ELISA has been set extremely sensitive, so that it is a good screening tool. By its extremely sensitive nature it loses its specificity and therefore, a second test — the Western Blot — is necessary to confirm that the test is truly positive, that the patient truly has the antibody to the HIV. False positives might occur to the ELISA. For example, tissue culture cell components from the viral culture might get plated in the well, or there might be some other reagents involved.

The false positive HIV antibody rate by ELISA varies considerably depending on the population studied. I've found rates ranging from 0 to 6.8%. If you screen with this ELISA test in a population which has a very low prevalence rate, you get a high false positive rate. For example, if you screened a population with a 0.1% positivity rate based on Western Blot, and you said that there was a .15% false positive Elisa, you would find that of 10 million people screened, 10,000 would have true positive and 15,000 would have false positive ELISA.

In groups that have a very high prevalence of HIV antibody, this false positive rate drops considerably. IV drug abuser populations are examples.

There can be false negatives to the ELISA. After the HIV first gets into the body it takes a while

Presented October 13, 1987, at a meeting of Central Medical Society in Jackson, MS.

Dr. Wofford is engaged in the private practice of internal medicine and infectious disease in Jackson, MS.



Figure 3



Figure 4

before the antibodies develop. They are first detectable at four weeks, then usually detectable by 12 weeks. There have been some cases in which the ELISA took six months to turn positive. And recently I heard of one taking 14 months to be positive. So there can be a false negative ELISA on the front end of the infection. Likewise, on the back end of the infection, when the patient becomes so ill they have difficulty producing the antibody, the HIV ELISA can also be negative.

I would like to point out that in the initial description of the HIV ELISA test in the AIDS patients tested, 82% had a positive ELISA; 16% were borderline; and 2% were negative. These results were in documented AIDS cases.

This brings me to the Western Blot. I won't go into the details of the laboratory testing technique, but I would like to say that the antigens are purified and spread out on electrophoretic gel. Then the patient's serum is placed on this. The antigen-antibody

reaction occurs and the antigen-antibody complex bands are detected by another marking substrate.

Important bands in this testing are the P-24, the GP-41, GP-20 and GP-160. You may have heard of these. Two bands need to be identified before you can call a test positive.

There are numerous problems with the Western Blot. It is very labor intensive; it is expensive; it is eye-read rather than machine-read, therefore there is considerable variability. This variability has been proven — one laboratory versus another, testing the same sample. Also, there was one recent study that showed that there was a false positive rate for the Western Blot of 1.17%. One other comment needs to be made about a false positive Western Blot. If you give IV immunoglobulin to someone in large doses you can create a false positive Western Blot by a passive transfer of anti HIV-IGG.

Also in regard to antibody testing, the neonate represents a special category. Infants born to moth-

TESTING/WOFFORD

ers who are HIV positive will all have a positive Western Blot because of the transfer of maternal anti HIV-IGG to the baby. Therefore it makes it very difficult to decide whether the neonate is in fact infected with the virus. There is a 40-60% chance that the baby will actually be infected.

Serum HIV antigen testing is possible. The HIV antigen used is the P-24 core protein that I mentioned earlier in connection with Western Blot testing. In acute infection the HIV antigen is detectable before the HIV antibody by ELISA is. The HIV antigen level later drops and is usually undetectable in asymptomatic HIV antibody-positive individuals. It again becomes positive later in the illness when AIDS is beginning, and in the later stages of the HIV infection it is high. Treatment with Zivodudine can make a definite decrease in the antigen level, but it doesn't necessarily correlate with clinical improvement.

So we have basically four categories for HIV antibody testing:

1. We can have HIV antibody-negative by ELISA and in that case the Western Blot would not be done.

2. We can screen and find the HIV antibody-positive by ELISA and subsequently have a positive HIV antibody by Western Blot. This means the patient is infected and infective for others. There has been a good correlation between actual viremia and a positive Western Blot.

3. We can have a patient with HIV antibody by ELISA positive and by Western Blot equivocal. In those circumstances the Western Blot should be repeated in 4-6 months.

4. Last, the HIV antibody by ELISA can be positive and by Western Blot negative. Thus, a false-positive ELISA.

Screening has been discussed a great deal. I want to mention a few things about this. It theoretically is a great thing to screen large populations, find all the positive individuals and modify their behavior so they won't infect others. Unfortunately, there are numerous downsides to this. (1) There is a great deal of expense involved with large screening programs; (2) The false positive tests I mentioned earlier, and the devastating effects they can have; (3) If we pick the wrong population to screen we could be wasting efforts. There have been numerous pop-

ulations proposed for screening. One is hospital admissions, and I think that most physicians believe at this point that it is not very worthwhile. The majority of hospitalized patients don't fit a risk group for infection. You can see this if you look just at the ages of hospitalized patients compared to the ages of HIV-infected patients. Another group under discussion for screening is people seeking marriage licenses. Recently in an October issue of JAMA there is a description of a study by a Harvard group on Acquired Immune Deficiency Syndrome and public policy. They projected what would happen if you mandatorily screened all people coming for a marriage license. They found that in one year, premarital screening in the United States "would detect fewer than one-tenth of one percent of HIV-infected individuals at a cost of substantially more than \$100 million. More than a hundred infected individuals would be told that they were probably not infected, and there would be likely more than 350 false positive results." It seems that this is not really the way to go.

In July the AMA delegates voted on what they thought would be a good plan. And this week (October 12) in JAMA the final print of that is out. I'd like to go over what the AMA recommends:

They say that mandatory testing should be done on four groups:

1. donors of blood and blood fractions, organs, tissues, semen and ova;
2. inmates of federal prisons;
3. immigrants to the United States;
4. military personnel.

Next, they say that routine voluntary testing with informed consent for persons from high AIDS incidence areas should be done in the following categories:

1. patients at STD or drug abuse clinics;
2. pregnant women in the first trimester;
3. people seeking family planning;
4. patients who require surgical or other invasive procedures.

I think this policy is worth considering. I think I can live with this policy for screening, especially with the informed consent added on. I think counseling is an important part of HIV testing. ★★

768 Lakeland Drive (39216)

AIDS in the Workplace

WILLIAM A. CAUSEY, M.D.

Jackson, Mississippi

I WAS ASKED to talk about AIDS in the workplace. Since the places in which we work are our offices and our hospitals, I'll speak mainly to those. I think you can not talk about dealing with the problem of AIDS in the workplace without talking about screening with the various serologic tests that Dr. Wofford just mentioned.

I have a few editorial comments I would like to make about screening, because my position on screening is considerably more conservative than the Reagan administration's or the AMA's. And I have real problems with it because I have too often had to counsel distraught individuals because of false-positive tests.

If we had a test that was absolutely accurate in identifying patients infected with HIV in a single step, it would be one thing. If we had a therapeutic intervention which we could use to treat that individual that would significantly modify the course of that infection, it would be one thing. If we had the means to modify behavior of infected individuals to reduce the risk to others in the population, it would be one thing. But we currently do not have the means to do any of the above. So therefore, I have a very negative view about indiscriminate screening. Let me give you an example. At the rates of infection that are present in the general population in this area (and as Dr. Thompson has already mentioned we have more data about infection rates with HIV in this area than most areas of the country have) the predictive value of a single ELISA test, in identifying a truly infected individual is only about 25%. That's with the best of laboratories, performing up to the highest standards of quality control. In other words, three out of four persons that turn up with a positive ELISA from the general population in central Mississippi without a history of high-risk be-

havior will be falsely positive. The only way to reliably identify infected individuals is to find those with repeatedly positive ELISA tests in high titer, confirmed with a positive Western Blot or other confirmatory test. The turnaround time on the ELISA test is hours at best, and in many hospitals, several days are required for results. So what good is that going to do the physician in the emergency department? It's going to take hours or days to get results of screening tests back. And you can't use such results to make a decision on handling an emergency case in the ER. Are you going to screen all elective surgery patients? Well, if screening means you would not perform surgery on patients with a positive test, you're going to exclude many patients on the basis of a false positive test when otherwise they might need a surgical treatment. The position of most surgeons in areas of high prevalence is swinging toward not doing preoperative screening tests. The principal reason is that the ones that are most experienced in operating on HIV infected individuals say whether or not a test is positive is not going to modify the way they handle themselves in the operating room.

I don't believe that all hospital admissions should be routinely screened because as Dr. Wofford has already pointed out, you're not aiming your efforts at the high risk group. And I believe it is wasteful and unduly costly to do appropriate screening.

Unfortunately the way that you identify infected individuals in 1987 (October) is by demonstrating a consistently positive EIA test on multiple occasions, confirmed with a Western Blot. Well, in my experience in my own practice in which I've had the opportunity so far to evaluate over 90 patients who are suspected of having HIV infection, you cannot do that in less than a week. It just cannot be done in Jackson, Mississippi, in less than a week. So you can't tell an individual whether or not they have been infected with HIV with any degree of certainty on the basis of a single screening test. You can assume a lot if the patient has a history of past

Presented October 13, 1987, at a meeting of Central Medical Society in Jackson, MS.

Dr. Causey is engaged in the private practice of internal medicine and infectious disease.

high-risk behavior and if the ratio of the patient's absorbance to the cutoff of control is greater than six-fold. Absorbance ratios of >6 have about 98% correlation with a positive Western Blot. You can tell them that most likely they've been infected, but you're putting yourself way out on a limb if you tell them flat-out on the basis of a positive screening test that they have been infected with HIV. You can counsel them into behavior patterns that advise them to act as if they were infected on the basis of a single screening test, but I think any physician would be foolish to say "you've got it" on the basis of a single screening test without demonstrating repeatedly positive screening tests, confirmed with Western Blot assay or similar confirmatory test. That is the standard now for diagnosing individuals infected with HIV.

"... it's a disease that creates a great deal of fear and apprehension among health care workers — most of which is based upon lack of knowledge of the disease and its transmission and on overestimation of the infectious potential of a patient infected with HIV."

As has already been pointed out, there are only about three ways in which this virus is transmitted from person to person. Because of the horrendous implications of infection with HIV, it is an infection of great concern to all health care workers. A substantial portion of patients infected with HIV are eventually going to die as a result of that infection. We don't know precisely what proportion are going to die as a result of that infection. The studies that have been reported were done on certain risk groups and do not necessarily reflect the course of infection in the broad spectrum of infected individuals. And I don't think you can draw too much of a conclusion on the entire picture based upon small studies limited to certain risk groups. But if you look at the studies that have been done — these deal mostly with gay males, and may not reflect the course of the disease in all infected individuals. But at least 30% — and these should be considered as minimum figures — at least 30% of infected individuals will develop AIDS over a period of five to seven years of followup. And once the diagnosis of AIDS develops, that is a uniformly fatal disease. Fifty percent will die within a year of fulfilling the disease definition; probably over 75% will die within two

years; over 90% will die after three years. A few patients, usually gay white males with Kaposi's sarcoma as their only opportunistic disease will live five years or more after diagnosis. So AIDS is essentially a 100% fatal illness as it exists in October of 1987.

So it is a disease that scares people, and physicians and other health care workers are no different from others in that regard. For that reason we see reports daily of physicians declining to care for patients infected with HIV, physicians declining to operate on patients infected with HIV, and all sorts of other events occurring.

So it's a disease that creates a great deal of fear and apprehension among health care workers — most of which is based upon lack of knowledge of the disease and its transmission and on overestimation of the infectious potential of a patient infected with HIV.

Why is it not an easy disease to transmit from person to person? Well, the main reason is it's a highly tissue trophic virus. The target cells for the HIV virus are very limited in the body. The T-4 marker that appears on certain lymphocytes is the receptor for the HIV. And only cells in the body that express this particular antigen on the cell surface are susceptible to infection with HIV. T-4 lymphocytes make up a very small proportion of circulating white blood cells. There are other cells in the body, notably macrophages and probably certain CNS cells, that also express the T-4 antigen and are thus susceptible to infection with HIV.

But if you look at the lymphocyte pool of the average infected individual who is viremic, only about one in 50,000 lymphocytes contain the virus. In contrast to hepatitis B virus, this virus does not for all practical purposes exist free in serum in infectious form. There are virus-associated proteins that may be found in serum. There are virus or virus products that may be found in tears, saliva, urine, semen, women's vaginal secretions, almost any body fluid that you could name, but that does not mean that those body fluids are important in transmission from person to person, regardless of the mode by which that material might be spread from one person to another. And thus far the only body fluids that have been shown to have any role in transmission from person to person are blood and blood products, semen, and women's vaginal secretions. Neither tears, nor saliva, nor feces, nor any other body secretion has been associated with transmission of this virus from person to person. So the mere fact that the virus might occasionally appear in the saliva does not mean that it is not safe to eat in a restaurant

because some gay waiter might have spit in the salad — they may spit in the salad, but they're not going to give you HIV infection if they do. They may *urinate* in the salad and that does not mean they're going to be the cause of a great plague of HIV infection. If it were possible for waiters in restaurants to spread the disease through anything they do in the course of their occupation in restaurants, then we would surely have seen a more dramatic increase in infection outside of known risk groups in areas of high disease prevalence such as New York or San Francisco. Thus far, only sexually active young adults, males and females, have shown a growing risk of infection in these areas.

Health care facilities may be the site of occupational infection with HIV, but the risk is exceptionally low. The Centers for Disease Control, for a number of years now, has conducted an ongoing prospective study of persons who have had accidental needle sticks, mucosal splashes and other types of exposures to body fluids and blood from persons known to be infected with HIV. In the entire study — and I think it involves well over 1000 people now, who have been followed for more than a year — there have been only three individuals that had a positive test after needle stick exposure. Only one person that I'm aware of demonstrated evidence of conversion of their antibody from negative to positive following exposure to HIV-infected materials. There have been anecdotal reports of six hospital workers who had positive tests after exposure to body fluids from HIV-infected patients. Three of those occurred as a result of deep needle puncture injuries on patients infected with HIV. And three of these occurred as a result of non-penetrative exposures to infected materials. These non-needlestick cases have caused a great deal of concern because of the manner in which some of the news media played it up — in a very misleading fashion. It was as though, if you walked into a room and there was a drop of blood floating in the air and it landed on you, you were doomed on the spot. But these three cases were gross episodes of exposure — one which involved a technician operating a cell sorter when a piece of tubing blew and splattered blood into face, mouth, eyes. This individual also had a case of acne with open skin lesions as well. Another case involved an individual who held bare hands for an extended period of time over an arterial bleeder. It was estimated that the time between exposure to blood by direct contact with hands until this individual finally got around to washing his hands was something in excess of 15 minutes. These are not ordinary exposures that we're talking about. They're

"We must be more meticulous in teaching, practicing, and enforcing sound principles of personal cleanliness and care in the handling of blood, blood-contaminated articles, body fluids and tissues in our hospitals and clinics. We can make our workplaces safe and maintain that safety."

all grossly-contaminated exposures — all with blood — none with urine, none with pleural fluid, none with any other body fluid other than blood — and only six occasions.

Our current estimate published by the CDC on the risk of transmission following needle stick injuries is .4% or less — .4% representing probably a maximum risk. One chance in 1000 following a needle stick injury of transmission of this virus. It is not easy to transmit, even in the context of penetrating injuries that occur with needles and other sharp objects contaminated with blood of HIV infected individuals.

The adherence to common infection control practices provides a safe working environment for health care professionals. I wouldn't mislead you by telling you that if you take care of patients infected with HIV that you are free of risk of being infected with HIV. That's just not so. There is *some* risk. But that risk can be minimized with adherence to barrier precautions that have been used for years in the handling of patients known to be infected with hepatitis B. And hepatitis B is orders of magnitude more easily transmitted in this kind of setting than is HIV. Blood and needle precautions as are commonly used in today's hospital are effective in protecting individuals so long as they are adhered to. In none of the instances that I mentioned (of the six instances of suspected transmission as a result of occupational exposure) — in none of those were common barrier precautions that have been in force and recommended for years utilized. It's silly to operate machinery in which there is the possibility of a major mucosal splatter in 1987 if you don't wear appropriate garments. That includes protective eyewear and masks if there is a risk of a significant mucosal splatter of blood or other infected materials. It's just silly. It's silly for laboratory workers to handle blood — blood specimens, blood tubes, other things — without gloves on in 1987. It's plain silly. It's silly to handle pathological specimens with your bare hands. It's silly to operate on people with your bare hands, and unfortunately in some places they still do. It's silly to do those things — in 1987.

AIDS IN THE WORKPLACE/Causey

Are there any precautions that need to be done on known infected individuals when you are doing an invasive procedure? Well, if you know they're infected I think you'll just be a little more careful in employing the common precautions that ought to be employed on most anybody that you do invasive procedures on.

So far we've not had any documentation that HIV-II, a second immunodeficiency virus that's prevalent in central and western Africa, Europe and South America, has reached our shores. But HIV-II is a retrovirus that may well cause an immunodeficiency disease similar to AIDS but is not detected by current methodology. There are screening tests that are being developed for this virus, but the current tests for HIV-I do not detect antibody against HIV-II and would not be effective in identifying patients infected with this agent should it reach our shores.

More and more hospitals in areas of high prevalence are going to what are called universal pre-

cautions. They use on all patients in the hospital the same type of barrier precautions that we currently recommend for HIV-infected individuals and hepatitis B-infected individuals. I really think that is the way to go for most hospitals in the future. In our area the prevalence of infection is at a low enough level that I don't think you can be dogmatic about universal precautions, but I would really like to see all of our hospitals work toward that goal of having universal blood and body fluid precautions on all patients.

I think that we can no longer afford to be casual about the infectious risk that blood and body fluids of our patients present. We must be more meticulous in teaching, practicing, and enforcing sound principles of personal cleanliness and in care in the handling of blood, blood-contaminated articles, body fluids, and tissues in our hospitals and clinics. We can make our workplaces safe and maintain that safety. ★★★

1600 North State Street (39202)

MSMA Policy Statement on AIDS

SINCE ITS IDENTIFICATION in 1981, acquired immunodeficiency syndrome (AIDS) has become a crisis in public health, with one million people in the United States believed to be infected with the virus. Already responsible for some 20,000 deaths, this disease is projected to cause 179,000 deaths by the year 1991. In that year an estimated 145,000 AIDS patients will require health and supportive services costing between \$8 billion and \$16 billion.

Besides its threat to the public health, this infectious, fatal, but preventable disease has produced unique medical, legal, social and political issues. As a guideline to its members in dealing with these issues, the Mississippi State Medical Association supports the following policy:

- The MSMA endorses educational efforts as the appropriate method of controlling the spread of HIV infection, and urges its members to exercise every opportunity to take a leading role in disseminating accurate information about AIDS transmission and prevention. In keeping with its stated purpose of promoting the public health, the association should provide physicians, speakers and other educational materials on a continuing basis according to need.

- Practicing physicians should adopt procedures for taking complete sexual histories of their patients and assume responsibility for educating at-risk persons about preventive measures. Physicians should take a leading role in eliminating public misconceptions about AIDS, attempting to alleviate public anxiety while emphasizing the preventable nature of this sexually-transmitted disease.

- Physicians should follow recommended (United States Public Health Service and American Hospital Association) hygienic guidelines for their own protection and should urge other health care professionals to do the same, in order to prevent occupational exposure.

- The MSMA deplors the denial of care to any patient solely because of his/her infection with AIDS. Patients with AIDS should receive no less care than any other patient requiring medical help, and denial of care on that basis constitutes a violation of ethical principles of medicine. However, not all physicians are emotionally prepared or educationally trained to care for such patients with AIDS or AIDS-related conditions, and in such events they are expected to withdraw from the case and refer the patient to another physician.

- The MSMA urges its members to educate

themselves about appropriate counseling techniques for seropositive patients, not only to compassionately help them cope with the stress of such news, but also to educate them about effective measures to prevent the spread of infection. Specifically, seropositive patients should be advised of proper ways to protect their sexual partners; should be urged to voluntarily remove their names from blood donor and organ donor lists, and seropositive women should be informed about the inadvisability of becoming pregnant because of the possibility of exacerbation of disease and risk of infection to the unborn infant. Physicians should be sensitive to the psychological needs of seropositive persons and recommend appropriate professional counseling and support groups.

- The MSMA urges its members to educate themselves about the limited mechanisms by which the HIV virus can be transmitted, and to help alleviate public discrimination against those who may be infected. It is appropriate for physicians to actively participate in forums for the establishment of public policy concerning AIDS patients.

- The MSMA recommends that informed consent for HIV testing be obtained whenever HIV infection is suspected, and the patient advised that test results will become part of the medical record.

- The MSMA urges its members to continue to safeguard patient confidentiality within the framework of applicable reporting laws and regulations.

- The MSMA believes that upon the development and/or approval for use in this country of a reliable test to detect AIDS carriers, that once detected, an AIDS carrier be reportable just like a carrier of any other communicable disease.

- The MSMA encourages further AIDS research, not only biomedical studies but also sociologic and economic. Because of the preventable nature of the disease, evaluation of educational interventions and reporting of effective behavior modification techniques should be done.

- In this already litigious society, there is predicted an explosion of AIDS-related lawsuits by the early 1990s. Claims will center around such issues as: employment discrimination; denial of care; violation of confidentiality; discrimination in military, occupational and school environments; denial of insurance coverage, etc. The MSMA urges its members to become informed about such cases and to actively participate in efforts to develop methods for society's coping with this expected additional burden of litigation.

Adopted by the MSMA House of Delegates, June 7, 1987.

Radiologic Seminar CCXLIX: Growing Skull Fractures of Childhood

G. THOMAS DesCHAMPS, JR., M.D.

BERNARD I. BLUMENTHAL, M.D.

Jackson, Mississippi

ALTHOUGH SKULL FRACTURES in children ordinarily heal without problems, occasionally the patient will develop a late complication known as a leptomeningeal cyst or "growing skull fracture." This complication, which reportedly occurs in 1% of childhood skull fractures, mainly occurs between ages one and three and rarely after age six.¹⁻³

The pathogenesis of this lesion is illustrated in Figure 1.⁴ The key is the presence of a dural tear accompanying the skull fracture which allows the underlying subarachnoid space to herniate through the skull fracture. Subarachnoid adhesions form, creating a ball-valve effect and trapping CSF within the expanding subarachnoid cyst. The cyst enlarges and transmits underlying pulsations to the fracture site which compromises healing and produces continued bony erosion and widening of the site. The enlarging cyst may further compromise the already contused brain parenchyma by compressing cerebrocortical vessels.⁴

These lesions occur predominantly in the parieto-occipital region and occasionally in the occipital or frontal bones.^{4,5} This parieto-occipital predominance may be secondary to increased dural protection provided by the thicker frontal and occipital bones. The fact that the dura is thinner and more adherent to bone in children may account for increased dural tears and subsequent cyst formation in infants and children.^{2,7} The lesion has a predilection for linear skull fractures with an initial diastasis of 4mm or greater.^{1,4,5}

Since the child may show no symptoms, the lesion may go unnoticed for years. However, these cysts are usually well developed by three to four

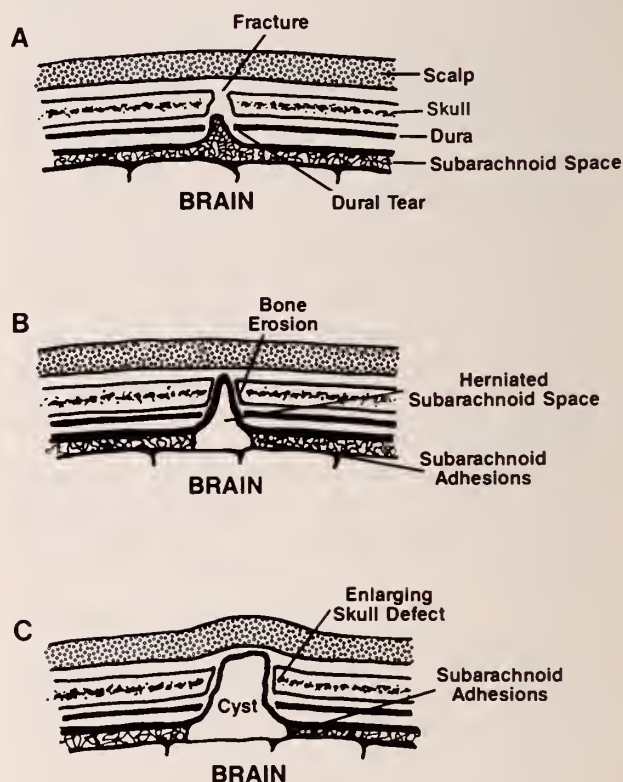


Figure 1. Mechanism of leptomeningeal cyst formation. A. Acute fracture with dural tear; B. Dural tear allows herniation of subarachnoid space through skull defect; C. Enlarging cyst with continued bone erosion. (From [4], modified.)

months after the initial injury.^{1,5,6} Clinically, the patient presents several months to years after head trauma with an enlarging soft, palpable mass bulging under the scalp. They may or may not have associated symptoms such as visual disturbances, headaches, vomiting, hemiparesis, or seizures.⁷

Radiographically a cyst usually presents as an

Sponsored by the Mississippi Radiological Society. From the Department of Radiology, University Medical Center, Jackson, MS.



Figure 2A. Leptomeningeal cyst. Acute left parieto-occipital fracture in a five-month-old male.



Figure 2B. Two months later, substantial growth of the fracture has occurred.

elliptical expanding skull defect with sclerotic, scalloped margins at the site of the original fracture (see Figure 2). Serial radiographs will show continued widening of the fracture line.

In addition to the calvarial erosion by the leptomeningeal cyst other complications have been reported such as pseudoaneurysm formation, and cerebral herniation through the defect.⁸ Previously, cerebral angiography has been recommended prior to surgery to determine the presence of cerebral herniation and/or vascular involvement.⁹ However, computerized tomography has been shown to demonstrate both CSF and soft tissue within the defect.²

Treatment consists of surgical removal of the cyst, dural repair, and cranioplasty. Good results may be obtained with resolution of neurological symptoms if the cyst is diagnosed early; therefore, current recommendations are to follow childhood skull fractures with radiographs at three month intervals until healing is complete.^{2, 4}

References

1. Pezzotta, S., Silvani, V., Gaetani, P., et al.: Growing Skull Fractures of Childhood. *J Neurosurg Sci*, 29:129-135, 1985.
2. Lye, R. H., Occleshaw, J. V., and Dutton, J.: Growing Fracture of the Skull and the Role of Computerized Tomography. *J Neurosurg*, 55:470-472, 1981.
3. Lende, R. A. and Erickson, T. C.: Growing Skull Fractures of Childhood, *J Neurosurg* 18:479-489, 1961.
4. Taveras, J. M., and Ransohoff, J.: Leptomeningeal Cysts of the Brain Following Trauma with Erosion of the Skull. A Study of Seven Cases Treated by Surgery. *J Neurosurg*, 10:233-241, 1953.
5. Gruber, F. H.: Post-Traumatic Leptomeningeal Cysts. *AJR*, 105:305-307, 1969.
6. Nemoto, S. and Hoffman, H. J.: Leptomeningeal Cyst of the Posterior Fossa. *J Neurosurg*, 65:704-705, 1986.
7. Gugliantini, P., Caione, P., Fariello, G., et al.: Post-Traumatic Leptomeningeal Cysts in Infancy. *Ped Radiol*, 9:11-14, 1980.
8. Rothmann, L., et al.: The Spectrum of Growing Skull Fractures in Children. *Pediatrics*, 57:26-31, 1976.
9. Tenner, M. S. and Stein, B. M.: Cerebral Herniation in the Growing Fracture of the Skull. *Radiology*, 94:351-355, 1970.



The President Speaking

Unity

W. LAMAR WEEMS, M.D.
Jackson, Mississippi

"More than anyone else, physicians occupy a natural leadership position. . . . Regrettably, several factors argue that doctors will not rise to the challenge of initiating effective change. *First of all, they treasure their independence too much to work together as a united group.* . . . This will create an interesting situation: On the one hand, *physicians will maintain their natural power base*; on the other hand, *there is every indication that they will not use it effectively.*"

(Robert H. Waterman, Jr., co-author, *In Search of Excellence*. From the Foreword: *Market Driven Strategies in Health Care*.)

Medicine, as every physician must know, is an embattled profession. Threats are all around. It is said so often in various phrases that doctors must stick together in this crisis that such admonitions have become clichés. (In this connection, every concerned physician should read the article, "The Deprofessionalization of Medicine," JAMA 258:3279, December 11, 1987.) Unfortunately, at a time when unity is most needed, powerful divisive forces are at work within the system.

If intensified competition degenerates into a discordant struggle among physicians and groups of physicians, who will maintain the "natural power base" for all physicians and who will defend professionalism? Numerous medical organizations have lately recognized the need to become involved in socioeconomic affairs and have offered leadership. All such involvement should be encouraged for the good it can do, but no organization, save the AMA, commands a broad enough constituency to represent all of medicine.

Some physicians don't like the connotations of "unity." Indeed, a few medical colleagues tend to make a fetish of individualism — personal and professional independence, if you will. However, most of these rugged individualists want the licensing boards to uphold standards, want legislative reform of the civil justice system, oppose DRG for physicians, want to eliminate some of the onerous provisions of PRO, etc. It is axiomatic that people with common goals must act in concert, in unity, in order to have influence in public affairs. Admittedly, unity and inde-

(Continued on page 32)

EDITORIALS

JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION

VOLUME XXIX, NUMBER 1

JANUARY 1988

AIDS Crisis Challenges Medical Profession

AIDS. The very mention of this acronym sends many people into hysteria. AIDS. The sound of this word brings to the mind of the health professional questions of ethics, costs, discrimination, debilitation and death. The AIDS crisis has created many problems and raised many questions for our society as well as for our profession. It is our challenge to provide the proposed solutions and informed answers and thereby guide the response of society to this crisis.

While research efforts continue in an effort to find effective methods of treatment, physicians, as a profession, need to be a part of the educational process that appears to be the only effective "treatment" at this time.

First, we must become better educated ourselves. It is up to us to understand as much about the disease process as possible. For it is only by our knowledge that we will be able to educate those whom we treat.

Our patients must be educated. We must take on the obligation to talk with them in frank terms about how AIDS is spread. It is our job to explain to them in a firm but caring manner that lifestyles must be changed and habits altered for their own protection. It befalls us to counsel AIDS patients and their families with the same compassion that would be extended to a terminally-ill cancer patient. The do's and don'ts of living with an AIDS patient need to be understood by those caring for the one who is sick.

And then, having done what is ethically required of us in the doctor-patient relationship, we must educate society. It is all too easy for the general public to take one tidbit of information and react improperly to the larger issue. The air of hysteria that has been exhibited by some in our society can only be calmed through an educational process. Who better can educate about a disease than those who treat it? Who better to be the authorities from whom information is sought than those who generate the data? Who better can assist in the formulation of

public policy than the physicians who deal with the disease day in and day out?

Society craves leadership on this issue. Are we leading as we should? To do so is our challenge.

MYRON W. LOCKEY, M.D.

Editor

LETTERS

TO DR. LOCKEY:

I write with regard to the editorial regarding the organ donor law passed in the 1987 session of the Mississippi legislature (*Journal MSMA*, October 1987). Several questions raised in the editorial deserve comment.

There is a nationwide shortage of vital organs prompted by the remarkable improvement in transplant survival statistics (80%-heart, 60%-lung, 50%-liver, 80%-kidney, at one year). This has resulted in an increased demand while the supply has remained static or even declined. In Mississippi, the shortage is even more acute as the donation rate is much below the national and even regional average. Our sister states (Alabama, Louisiana and Georgia) have had laws on their books for some time to protect and preserve for local use organs donated in their respective states. Mississippi has been open to exploitation by our neighbors until SB2666 passed the 1987 legislature. Patients waiting for heart, lung or liver transplantation experience a 60% mortality on the waiting list. Lack of restriction on the exportation of organs from our state can only worsen this situation and may even jeopardize the transplant program within the state as federal regulation mandates a minimum number of donors for certification of programs.

The concept that donated organs are a public resource and should be distributed on an equitable basis is now codified into federal law. Federal regulations are due to be issued that will insure assignment of organs strictly on the basis of priority criteria. "Exclusive service areas" for each trans-

LETTERS/Continued

plant program are also likely to be mandated in regulations due to be released shortly.

The "required request" law has had a favorable experience in over 30 states where it has been in effect for some years. Contrary to initial fears, such laws have been enthusiastically received by the lay public which has been ahead of the medical community in this regard. Physician apathy and reluctance to ask permission for organ donation at the time of death continues to be identified as a major factor in a poor donation rate nationwide. The Budget Reconciliation Act of 1987 will require a mandatory request for organ donation in all acute care hospitals. While some changes suggested in the editorial are certainly in order in the state law, mandatory request through federal legislation is here to stay. We can hope for a diminution of government regulation in the area of organ donation and distribution only when the donation rate catches up with the demand and shortages disappear. This prospect seems unlikely in the foreseeable future.

SESHADRI RAJU, M.D.
University Medical Center
Jackson, MS

TO DR. LOCKEY:

Mississippi Hospital Association Staff was delighted to see your editorial from the October 1987 JOURNAL concerning SB 2666 (Mississippi Organ Donor Protocol requirement). Attempts to develop a reasonable and prudent procedure for handling the admission question portion of the law have taken a great deal of staff time and effort over the past year. We have distributed to our membership a model protocol which includes a suggested procedure for handling the admission screen. Though we attempted to make the admission screen procedure as

non-threatening as possible within the confines of the law, we are still concerned at the insensitivity to the patient and family needs at the time of admission. The healthcare environment, which is so ordinary and commonplace to the professionals who work within it, is so very frightening and extraordinary to those who come into it for services.

We are preparing an amendment to the law for introduction into the Mississippi legislature after it convenes in January. It is our sincere hope that this amendment will be passed and the unnecessary and fruitless admission screen of patients can come to an end.

MARY M. PATTERSON
Vice President
Mississippi Hospital Association

Editor's Note: I appreciate the letters responding to the editorial. Both writers agree that portions of the law need revision in order to make it more attractive and manageable.

I was not aware of the fact that federal law now stipulates that donated organs are a public resource and would be controlled as such.

The data regarding limitation of procurement of organs and tissues to each state is appreciated. At its most recent meeting the AMA House of Delegates reaffirmed the position of the AMA through Resolution 94 that donor organs should be considered and treated as a national resource and should not be restricted by or to Geo-political boundaries or districts and that the AMA oppose any attempt to restrict use of donor tissues to specific Geo-political subdivisions.

I am also impressed with the reported results and advancements in the program at the University Medical Center. This is a vast change from what many of us remember in past years.

This is an opportunity for a cooperative effort in establishing changes beneficial to patients, physicians, and transplant services. — (M.W.L.)

— Next Month in JOURNAL MSMA —

James Grant Thompson Memorial Lecture:
What Everyone Should Know About Vascular Trauma

Radiological Seminar CCXLIX: The Role of
Radiographic Evaluation in the Diagnosis of Epiglottitis

Current Concepts: Habilitation of the Child with Myelomeningocele
(Part VII: Adolescence/Sexuality/Vocational Skills)

The Miniature Battery: A New Foreign Body Hazard

MEDICAL ORGANIZATION

MSMA Board of Trustees Conducts Fall Meeting

At their regular fall Board Meeting, MSMA's trustees and officers considered an extensive agenda including the association's 1988 budget, tort reform, and expanded programs for the medically needy.

The Board approved a 1988 budget of \$5.2 million for MSMA's operations and administrative programs and membership services provided through MSMA Services, Inc. The Board also acted to request consultant proposals for development of a long-range strategic plan for organized medicine in Mississippi in light of the rapid changes occurring in the health care environment and the need for new programs to address these changes.

The Board reviewed plans for the association's participation in a coalition of business and professional "Mississippians for Civil Justice Reform" which will seek enactment of extensive tort reform legislation by the 1988 Mississippi Legislature. The coalition currently is conducting local meetings with members of the legislature throughout the state, and MSMA members and staff are participating in these meetings.

The Board continued its study of programs to address the needs of the state's growing medically needy population. The Board approved plans to seek expansion of Medicaid to include a demonstration casemanager program and to seek establishment of an on-going legislative/executive branch/voluntary health agency committee to study and address the needs of the medically needy. The Board also approved plans for MSMA sponsorship, in cooperation with the Mississippi Council on Aging, of a "Senior Care Program" for medically needy senior citizens. The program will begin on a pilot basis in selected areas of the state over the next few weeks.

In other actions, the Board met with representatives of the Mississippi Board of Medical Licensure and endorsed present regulations of that board dealing with licensure by reciprocity; endorsed selected recommendations of the Mississippi Department of Health dealing with AIDS legislation; and directed that the association continue its legal challenge of a ruling by the Mississippi Ethics Commission dealing with physician representation on hospital governing boards.

MSMA's Board members and officers attending the December meeting in Jackson included: J. Ed Hill, M.D., Hollandale, Chairman; David M. Owen, M.D., Hattiesburg, Vice Chairman; Stanley A. Wade, Jr., M.D., Meridian, Secretary; Stanley Hartness, M.D., Kosciusko; Lee H. Rogers, M.D., Tupelo; John P. Lee, M.D., Forest; Fred L. McMillan, M.D., Jackson; Mal G. Morgan, M.D., Natchez; David L. Clippinger, M.D., Gulfport; W. Lamar Weems, M.D., Jackson, President; David R. Steckler, M.D., Natchez, President-elect; W. Joseph Burnett, M.D., Oxford, Immediate Past President; Don Q. Mitchell, M.D., Jackson, Secretary-Treasurer; James C. Waites, M.D., Laurel, Speaker of the House; H. Vann Craig, M.D., Natchez, Vice Speaker of the House; Sidney O. Graves, Jr., M.D., Natchez, Delegate to AMA; Carl G. Evers, M.D., Jackson, Delegate to AMA; and Mrs. Peggy Herrington, President, MSMA Auxiliary.

Governor-Elect Ray Mabus Addresses Young Physicians



Governor-Elect Mabus, second from left, spoke at a statewide meeting of the Young Physicians Section in November. Welcoming him were, from left, Dr. Lamar Weems, MSMA president; Dr. George McGee, chairman, MSMA/YPS; and Dr. Alan Nelson, chairman of the AMA Board of Trustees.

Congressman Dowdy Addresses Central Medical Society



Rep. Wayne Dowdy, left, discussed the Congressional situation regarding health issues in an address to members of Central Medical Society. He was welcomed by CMS president Ted Blanton, M.D., at right.

Dr. Triplett Named President, American College of Allergists

Dr. R. Faser Triplett of Jackson was installed as president of the American College of Allergists (ACA) at its 44th Annual Congress November 14-16 in Boston.

Dr. Triplett, who has served in the American Medical Association's House of Delegates since 1983 and on the Board of the American Medical Political Action Committee since 1985, is a past president and former speaker of the House of Delegates of the Mississippi State Medical Association. He also serves as president of Medical Assurance Company of Mississippi, the association-sponsored professional liability insurance company.

Clinical assistant professor of pediatrics at the University of Mississippi School of Medicine, Dr. Triplett is certified by the American Board of Pediatrics and the American Board of Allergy and



Immunology. After receiving his medical degree from Tulane University, he served his residency in pediatrics and pediatric allergy at the University of Tennessee, Memphis, and his fellowship in allergy and immunology at the University of Colorado. Dr. Triplett has been associated with the Mississippi Allergy Clinic in Jackson since 1966, when he became the first board-certified allergist in the state.

Central Medical Society Honors Dr. James D. Hardy



Dr. James D. Hardy, left, received tributes from members of Central Medical Society at their December meeting. At right are Dr. Ted Blanton, president of CMS, and his wife, Barbara.

Central Medical Society paid tribute to Dr. James D. Hardy, who recently retired after 32 years as chairman of the Department of Surgery at University of Mississippi School of Medicine.

A resolution presented at the society's December meeting noted Dr. Hardy's "pioneering contributions in the field of transplant surgery, his voluminous contributions to the medical literature . . . and his leadership roles as officer and president in each of the major U.S. and free world surgical organizations."

Dr. Hardy, who has authored more than 700 articles and more than 20 books in addition to numerous editorial contributions, was also commended for his contributions to Mississippi medicine, "particularly his personal involvement in the education of 2946 medical students and training of 174 surgical residents and fellows."

UMC Announces Faculty Appointments

Six have been named in faculty appointments in the Schools of Medicine and Health Related Professions and centerwide at the University of Mississippi Medical Center for the current academic session.

Dr. Norman C. Nelson, UMC vice chancellor for health affairs, announced the appointments following approval by the Board of Trustees of State Institutions of Higher Learning.

In the School of Medicine, Dr. Deborah Stepp Skelton and Dr. Thomas N. Skelton were appointed assistant professors of medicine.

Appointed in the School of Health Related Professions were Vicky Youngblood Ivey, instructor in emergency medical technology, and Clifford A. Palmer, instructor in health record administration.

Centerwide, Dr. John J. Correia was named assistant professor of biochemistry and Dr. Richard D. McCabe, instructor in physiology and biophysics.

Dr. Deborah Skelton is a 1976 graduate of Ole Miss and earned the M.D. in 1981 at the University of Mississippi Medical Center. She took her residency in internal medicine at the University of Texas Southwestern Affiliated Hospitals and completed a fellowship in gastroenterology in 1986 at Duke University Medical Center. She had been a lecturer in medicine at Duke and chief of the gastroenterology clinic at Durham Veterans Administration Medical Center at Durham, North Carolina since 1986.

Dr. Thomas Skelton earned the B.S. and the B.A. in 1977 at Ole Miss and the M.D. in 1981 at UMC. He did his internship and residency at the University of Texas Southwestern Affiliated Hospitals, followed by a fellowship in cardiology in 1987 at Duke University Medical Center. Prior to his UMC appointment, he was an associate in medicine at Duke and director of the cardiac catheterization laboratory at Durham Veterans Administration Medical Center at Durham, North Carolina.

Ms. Ivey attended Ole Miss and Hinds Junior College and earned the B.S.N. at UMC in 1983. She has been at University Hospital on the nursing staff since 1983.

Palmer earned the B.B.A. in 1974 at Ole Miss and the MBA in 1984 at Millsaps College. He worked with the Campus Crusade for Christ at San Bernardino, California, as manager of reporting and control from 1974-1979, and management accountant and programmer/analyst in 1979. A financial

systems implementation manager of Trend Line Corporation from 1979-1981, he had been associate analyst from 1981-1982 and senior systems analyst from 1982-1985 with Middle South Services. Prior to his UMC appointment, he was manager of the computer services division of the Mississippi Research and Development Center since 1985.

Dr. Correia earned the B.A. in 1972 at Villanova University and the Ph.D. in 1981 at the University of Connecticut. He had been a research associate from 1981-1985 and research instructor in molecular biology since 1985 at Vanderbilt University.

Dr. McCabe, a 1978 graduate of Kansas State University, earned the Ph.D. in 1984 at the University of Kansas Medical Center, where he took his postdoctoral fellowship. He was a research assistant physiologist at the University of California at San Diego Medical Center from 1986-1987. He has been a senior research associate in physiology and biophysics at UMC since 1987.

PRINTING — OFFICE SUPPLIES

EQUIPMENT — FURNITURE



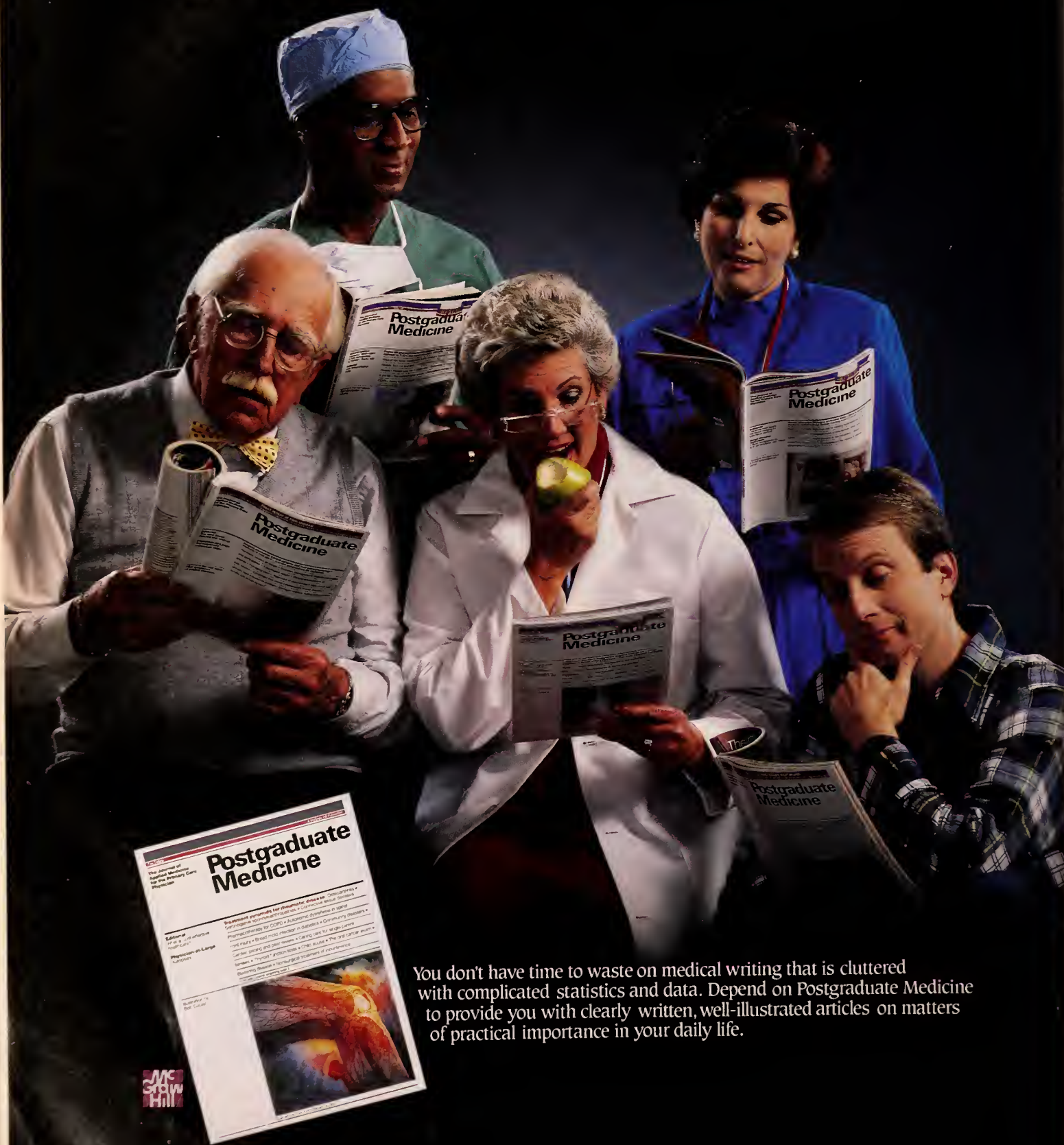
Premier Printing Company

2485 West Capitol

Jackson, Mississippi

Phone 352-4091

Make Postgraduate Medicine a Part of Your Life.



You don't have time to waste on medical writing that is cluttered with complicated statistics and data. Depend on Postgraduate Medicine to provide you with clearly written, well-illustrated articles on matters of practical importance in your daily life.

Mc
Graw
Hill

NEW MEMBERS

ALLEN, BRET C., Jackson. Born June 23, 1955, Jackson, MS; M.D., University of Texas Medical Branch, Galveston, 1981; pathology residency, University of Mississippi Medical Center, Jackson, 1982-86; elected by Central Medical Society.

ALLEN, KAY G., Jackson. Born Jan. 16, 1956, Monroe, LA; M.D., Louisiana State University Medical School, New Orleans, 1980; anatomic and clinical pathology residency, University Medical Center, Jackson, MS, 1980-84; elected by Central Medical Society.

BEEBE, DIANE KAYE, Jackson. Born Evanston, IL, April 29, 1958; M.D., University of Mississippi Medical School, Jackson, May 1984; family medicine residency, University Medical Center, Jackson, 1984-87; elected by Central Medical Society.

BERNADAS, RONALD P., JR., Pass Christian. Born Feb. 4, 1954, New Orleans, LA; M.D., Louisiana State University School of Medicine, New Orleans, 1982; interned and anesthesiology residency, Charity Hospital and Tulane University Hospital, New Orleans, 1982-85; elected by Coast Counties Medical Society.

BURWELL, DUDLEY S., JR., Biloxi. Born Indianola, MS, March 11, 1956; M.D., University of Mississippi School of Medicine, Jackson, 1982; interned and orthopedic surgery residency, University of New Mexico Hospitals, Albuquerque, 1982-87; elected by Coast Counties Medical Society.

CAVETT, JAMES RICK, III, Jackson. Born Jackson, MS, Nov. 25, 1952; M.D., University of Texas Southwestern Medical School, Dallas, June 1977; interned Parkland and V.A. Hospital, Dallas, 1977-78; pathology residency, Wilford Hall Medical Center, Lackland AFB, TX, 1980-84; fellowship in cytopathology, University of Texas, San Antonio, 1984-85; elected by Central Medical Society.

COPE, JOHN WILLIAM, Pascagoula. Born Troy, AL, Aug. 17, 1952; M.D., Emory University School of Medicine, Atlanta, GA, 1978; interned and orthopedic surgery residency, Eugene Talmadge Memorial Hosp., Augusta, GA, 1978-83; elected by Singing River Medical Society.

CURRENT, JOHN DAVID, Jackson. Born Portland, IN, Aug. 31, 1949; M.D., Indiana University School of Medicine, Indianapolis, 1975; interned Fitzsimmons Army Hospital, Denver, CO, 1975-76; anes-

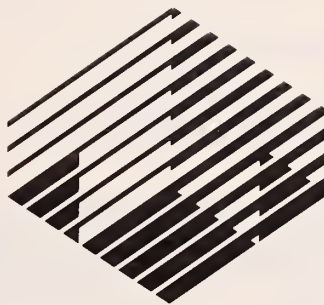
thesiology residency, Brooke Army Medical Center, San Antonio, TX, 1978-81; elected by Central Medical Society.

DEFREESE, CRAIG N., Meridian. Born Decatur, IL, Sept. 26, 1955; M.D., State University of New York at Stony Brook School of Medicine, Stony Brook, NY, 1981; interned and ob-gyn residency, St. Francis Hospital, Hartford, CT 1981-85; elected by East Mississippi Medical Society.

FERGUSON, DIANE, Jackson. Born Sardis, MS, Jan. 25, 1956; M.D., University of Mississippi School of Medicine, Jackson, 1984; interned and family medicine residency, University Medical Center, Jackson, 1984-87; elected by Central Medical Society.

FLETCHER, JEFF A., Jackson. Born Zanesville, OH, Aug. 5, 1952; M.D., University of Mississippi School of Medicine, Jackson, 1978; interned, medicine residency and cardiology fellowship, University Medical Center, Jackson, 1978-83; elected by Central Medical Society.

FURNISS, JAN L., Clarksdale. Born Clarksdale, MS, March 4, 1958; M.D., University of Mississippi



**We earn
your trust every day.™**



Trustmark™
National Bank

Jackson/Bogue Chitto/Brookhaven/Canton/Canton/Columbia
Georgetown/Gloster/Greenville/Greenwood/Hattiesburg/Halehurst
Leland/Liberty/Madison/Magee/McComb/Pearl/Petal/Ridgeland
Tylertown/Wesson

Member FDIC

NEW MEMBERS/Continued

School of Medicine, Jackson, 1983; interned and ob-gyn residency, University of Louisville, Louisville, KY 1983-87; elected by Clarksdale and Six Counties Medical Society.

GADDY, JAMES HURD, JR., Gulfport. Born New Orleans, March 28, 1956; M.D., University of Mississippi School of Medicine, Jackson, 1982; interned and ob-gyn residency, University of South Alabama, Mobile, 1982-86; elected by Coast Counties Medical Society.

GONZALEZ, MARIA I., McComb. Born Argentina, April 30, 1944; M.D., Universidad Nacional De Cordoba, Argentina, 1968; ob-gyn residency Brooklyn Cumberland Medical Center, NY, 1976-80; elected by South Central Medical Society.

GRIFFIS, KENNETH RAY, JR., Jackson. Born Fort Ord, CA, April 2, 1954; M.D., Texas Tech University School of Medicine, Lubbock, 1983; interned, same, July-December, 1983; ob-gyn resi-

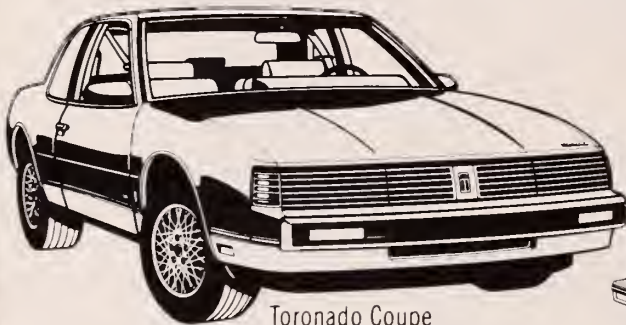
dency, University Medical Center, Jackson, MS, 1984-87; elected by Central Medical Society.

HAMPTON, HARRIETTE LEE, Jackson. Born Johnson City, TN, July 22, 1957; M.D., East Tennessee State University College of Medicine, Johnson City, 1983; interned and ob-gyn residency, University Medical Center, Jackson, MS, 1983-87; elected by Central Medical Society.

HESS, LEONARD WAYNE, Jackson. Born Tazewell County, VA, Nov. 23, 1949; M.D., Medical College of Virginia, Commonwealth University School of Medicine, Richmond, 1977; interned, ob-gyn residency, Naval Hospital, Portsmouth, VA, 1977-81, fellowship, maternal-fetal medicine, Naval Hospital, Bethesda, MD, and Walter Reed Medical Center, Washington, DC, 1981-83; elected by Central Medical Society.

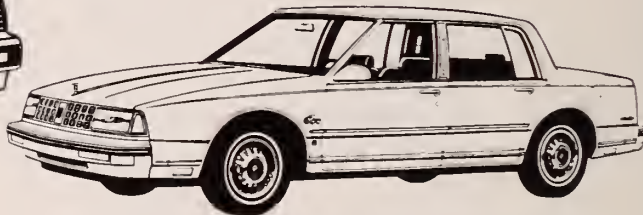
Keady, DWIGHT, S., JR., Jackson. Born Fort Worth, TX, Jan. 8, 1957; M.D., University of Mississippi School of Medicine, Jackson, 1984; interned and medicine residency, University Medical Center, Jackson, 1984-87; elected by Central Medical Society.

Oldsmobile Quality. Feel it.



Toronado Coupe

Deal with the Dealer
Chosen by the MSMA



Ninety-Eight Regency Brougham Sedan

"CONVENIENT & COURTEOUS SERVICE"

ASK FOR OUR SPECIAL "COST PLUS" PLAN FOR MSMA MEMBERS!

HARRELD CHEVY-OLDS

CALL BRIAN KING 601-354-2233

LEE, JAMES ANTHONY, Jackson. Born Monroe, LA, July 8, 1957; M.D., Louisiana State University School of Medicine, Shreveport, 1983; pathology residency, University Medical Center, Jackson, MS, 1983-85; pediatric pathology fellowship, Mt. Sinai Medical Center, New York, NY, 1985-86; elected by Central Medical Society.

NEILL, JAMES S., Jackson. Born Jackson, MS, Aug. 25, 1953; M.D., University of Mississippi School of Medicine, Jackson, 1978; interned and family practice residency, Eugene Talmadge Memorial Hospital, Augusta, GA, 1978-81; pathology residency, University Medical Center, Jackson, MS, 1984-87; elected by Central Medical Society.

PARKS, PAUL FRANKLIN, JR., Gulfport. Born Opelika, AL, Dec. 10, 1954; M.D., University of Alabama School of Medicine, Birmingham, 1981; interned, same, one year; orthopedic surgery residency, Vanderbilt University, Nashville, TN, 1982-86; elected by Coast Counties Medical Society.

PEEPLES, SAMUEL H., Jackson. Born Clarksdale, MS, Sept. 12, 1956; M.D., University of Mississippi School of Medicine, Jackson, 1984; interned and medicine residency, University Medical Center, Jackson, 1984-87; elected by Central Medical Society.

SCHRADER SARA B., Jackson. Born Evansville, IN, Dec. 12, 1942; M.D., University of Mississippi School of Medicine, Jackson, 1984; interned and family medicine residency, University Medical Center, Jackson, 1984-87; elected by Central Medical Society.

SHROCK, WIRT F., JR., Durant. Born Lexington, MS, July 9, 1949; M.D., University of Mississippi School of Medicine, Jackson, 1984; interned and family practice residency, University of Alabama Medical School, Selma, 1984-87; elected by North Central Medical Society.

SLACK, ROBERT GEORGE, Biloxi. Born Chicago, IL, Aug. 20, 1938; M.D., University of Illinois College of Medicine, Chicago, 1964; interned, one year, Butterworth Community Hospital, Grand Rapids, MI; adult psychiatry residency and child psychology fellowship, University of Washington, Seattle, 1967-71; elected by Coast Counties Medical Society.

SPRUIELL, LINWOOD RAY, Jackson. Born Norfolk, VA, Aug. 31, 1955; M.D., Meharry Medical College, Nashville, TN, 1981; interned one year, Wayne State University, Detroit, MI; anesthesiology residency, University Medical Center, Jackson, MS, 1985-87; elected by Central Medical Society.

STEINER, ALBIN H., Houston. Born New Orleans, Oct. 20, 1924; M.D., Louisiana State University School of Medicine, New Orleans, 1953; interned, same, one year; general practice residency, Lafayette Charity Hospital, Lafayette, LA, 1954-55; radiology residency, Mallinckrodt Institute, St. Louis, MO, 1958-61, elected by Northeast Medical Society.

WEEKS, THOMAS LANE, Vicksburg. Born Delhi, LA, Feb. 10, 1957; M.D., Louisiana State University School of Medicine, New Orleans, 1983; interned and ob-gyn residency, Charity Hospital, New Orleans, 1983-87, elected by West Mississippi Medical Society.

WELCH, BERT A., III, Jackson. Born Jackson, MS, Nov. 22, 1958; M.D., University of Mississippi School of Medicine, Jackson, 1984; interned, East Carolina Medical School, Greenville, NC, one year; anesthesiology residency, University Medical Center, Jackson, MS, 1985-87; elected by Central Medical Society.

WILSON, DARILYNN W., Jackson. Born Indianola, MS, Feb. 2, 1952; M.D., University of Mississippi School of Medicine, Jackson, 1984; interned and anesthesiology residency, University Medical Center, Jackson, 1984-87; elected by Central Medical Society.

WILSON, JAMES KIRK, Jackson. Born Jacksonville, AR, Feb. 24, 1958; M.D., University of Texas Medical School at Houston, 1984; interned and anesthesiology residency, University Medical Center, Jackson, MS, 1984-87; elected by Central Medical Society.

WOOD, EVAN H., Gulfport. Born Hazlehurst, MS, Aug. 11, 1949; M.D., University of Health Sciences, College of Osteopathic Medicine, Ft. Worth, TX, 1982; interned, one year, Dallas-Fortworth Medical Center, Grand Prairie, TX; ob-gyn residency, Normandy Osteopathic Hospital, St. Louis, MO, 1984-87; elected by Coast Counties Medical Society.

POSTGRADUATE CALENDAR

January

FOCUS ON INFECTION — 1988

Jan. 1

University Medical Center

February

ADVANCED TRAUMA LIFE SUPPORT PROVIDERS' COURSE

Feb. 18-20

University Medical Center

March

NUCLEAR MEDICINE UPDATE

March 5

Ramada Renaissance Hotel, Jackson

SURGICAL FORUM

March 10-12

Holiday Inn Downtown, Jackson

April

SPRING SONIC SYMPOSIUM

April 9

Natchez Eola Hotel, Natchez

1988 MISSISSIPPI OPHTHALMOLOGY SPRING MEETING

April 9-10

Holiday Inn Downtown, Jackson

DIAGNOSIS AND TREATMENT OF INFECTIONS IN DIABETES MELLITUS

April 27-30

Ramada Renaissance Hotel, Jackson

For more information or a program brochure, contact the University of Mississippi Medical Center Division of Continuing Health Professional Education, 2500 North State Street, Jackson, Mississippi 39216-4505; or call (601) 984-1300.

JOIN



TODAY

YOCON® YOHIMBINE HCl

Description: Yohimbine is a 3a-15a-20B-17a-hydroxy Yohimbine-16a-carboxylic acid methyl ester. The alkaloid is found in Rubaceae and related trees. Also in Rauwolfia Serpentina (L) Benth. Yohimbine is an indolalkylamine alkaloid with chemical similarity to reserpine. It is a crystalline powder, odorless. Each compressed tablet contains (1/12 gr.) 5.4 mg of Yohimbine Hydrochloride.

Action: Yohimbine blocks presynaptic alpha-2 adrenergic receptors. Its action on peripheral blood vessels resembles that of reserpine, though it is weaker and of short duration. Yohimbine's peripheral autonomic nervous system effect is to increase parasympathetic (cholinergic) and decrease sympathetic (adrenergic) activity. It is to be noted that in male sexual performance, erection is linked to cholinergic activity and to alpha-2 adrenergic blockade which may theoretically result in increased penile inflow, decreased penile outflow or both.

Yohimbine exerts a stimulating action on the mood and may increase anxiety. Such actions have not been adequately studied or related to dosage although they appear to require high doses of the drug. Yohimbine has a mild anti-diuretic action, probably via stimulation of hypothalamic centers and release of posterior pituitary hormone.

Reportedly, Yohimbine exerts no significant influence on cardiac stimulation and other effects mediated by B-adrenergic receptors, its effect on blood pressure, if any, would be to lower it; however no adequate studies are at hand to quantitate this effect in terms of Yohimbine dosage.

Indications: Yocon® is indicated as a sympathicolytic and mydriatic. It may have activity as an aphrodisiac.

Contraindications: Renal diseases, and patient's sensitive to the drug. In view of the limited and inadequate information at hand, no precise tabulation can be offered of additional contraindications.

Warning: Generally, this drug is not proposed for use in females and certainly must not be used during pregnancy. Neither is this drug proposed for use in pediatric, geriatric or cardio-renal patients with gastric or duodenal ulcer history. Nor should it be used in conjunction with mood-modifying drugs such as antidepressants, or in psychiatric patients in general.

Adverse Reactions: Yohimbine readily penetrates the (CNS) and produces a complex pattern of responses in lower doses than required to produce peripheral a-adrenergic blockade. These include, anti-diuresis, a general picture of central excitation including elevation of blood pressure and heart rate, increased motor activity, irritability and tremor. Sweating, nausea and vomiting are common after parenteral administration of the drug.^{1,2} Also dizziness, headache, skin flushing reported when used orally.^{1,3}

Dosage and Administration: Experimental dosage reported in treatment of erectile impotence.^{1,3,4} 1 tablet (5.4 mg) 3 times a day, to adult males taken orally. Occasional side effects reported with this dosage are nausea, dizziness or nervousness. In the event of side effects dosage to be reduced to 1/2 tablet 3 times a day, followed by gradual increases to 1 tablet 3 times a day. Reported therapy not more than 10 weeks.³

How Supplied: Oral tablets of Yocon® 1/12 gr. 5.4 mg in bottles of 100's NDC 53159-001-01 and 1000's NDC 53159-001-10.

References:

1. A. Morales et al., New England Journal of Medicine: 1221, November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27-2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

Rev. 1/85



AVAILABLE EXCLUSIVELY FROM
**PALISADES
PHARMACEUTICALS, INC.**

219 County Road
Tenafly, New Jersey 07670
(201) 569-8502
Outside NJ 1-800-237-9083

MEETINGS

National and Regional

American Medical Association, Annual Meeting, June 26-30, 1988, Chicago. James H. Sammons, Executive Vice President, 535 N. Dearborn St., Chicago, IL 60610.

State and Local

Mississippi State Medical Association, 120th Annual Session, June 15-19, 1988, Biloxi. Charles L. Mathews, Executive Secy., 735 Riverside Drive, P.O. Box 5229, Jackson 39216.

Mississippi Academy of Family Physicians, Annual Meeting, July 27-30, 1988, Biloxi. Mrs. Alyce Palmore, Executive Secy., P.O. Box 12330, Jackson 39211.

Amite-Wilkinson Counties Medical Society, 3rd Monday, March, June, September, December. James S. Poole, Secy., The Gloster Clinic, Gloster 39638. Counties: Amite, Wilkinson.

Central Medical Society, 1st Tuesday, February, April, October, December, 6:30 p.m., Primos Northgate Restaurant, Jackson. Patsy Douglas, Executive Secy., 735 Riverside Dr., Jackson, MS 39202. Counties: Hinds, Leake, Madison, Rankin, Scott, Simpson.

Claiborne County Medical Society, 1st Tuesday, each month, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Secy., P.O. Box 147, Port Gibson 39150. County: Claiborne.

Clarksdale and Six Counties Medical Society, 3rd Wednesday, April, and 1st Wednesday, November, 2:00 p.m., Clarksdale. Rodney Baine, Secy., 110 Yazoo Ave., Clarksdale 38614. Counties: Coahoma, Quitman, Tallahatchie, Tunica.

Coast Counties Medical Society, January, May, and November. H. S. Barrett, Secy., P.O. Box 1810, Gulfport 39501. Counties: Hancock, Harrison, Stone.

Delta Medical Society, 2nd Wednesday, April and October. Walter H. Rose, Secy., 122 E. Baker St., Indianola 38751. Counties: Bolivar, Humphreys, Leflore, Sunflower, Washington, Yazoo.

DeSoto County Medical Society, 3rd Thursday, February and August, 1:00 p.m., Kenny's Restaurant, Hernando. Malcolm D. Baxter, Jr., Secy., Baxter Clinic, Hernando 38632. County: DeSoto.

East Mississippi Medical Society, 1st Tuesday, February, April, June, October, December. Charles L. Wilkinson, Secy., Mail: Ms. Jenkins, P.O. Box 4053, Meridian 39305. Counties: Clarke, Kemper, Lauderdale, Neshoba, Newton, Winston.

Homochitto Valley Medical Society, Meetings scheduled quarterly. Fred G. Emrick, Secy., P.O. Box 1488, Natchez 39120. Counties: Adams, Jefferson.

North Central District Medical Society, 3rd Wednesday, March, June, September, January. Charles S. Watras, 612 Summit St., Winona 38967. Counties: Attala, Carroll, Choctaw, Grenada, Holmes, Montgomery, Webster.

Northeast Mississippi Medical Society, 1st Thursday, March, June, September, December. Roger L. Lowery, Secy., 618 Pegram Dr., Tupelo 38801. Counties: Alcorn, Calhoun, Chickasaw, Itawamba, Lee, Monroe, Pontotoc, Prentiss, Tishomingo, Union.

North Mississippi Medical Society, 1st Thursday, April, September, December. Cherie Friedman, Secy., 424 South 5th, Oxford 38655. Counties: Benton, Lafayette, Marshall, Panola, Tate, Tippah, Yalobusha.

Pearl River County Medical Society, 2nd Monday, March, June, September, December. J. C. Griffing, Secy., Crosby Memorial Hospital, Picayune 39466. County: Pearl River.

Prairie Medical Society, 2nd Tuesday, March, June, September, December. R. Ray Lyle, Secy., P.O. Box 1507, Starkville, MS 39759. Counties: Clay, Oktibbeha,

Singing River Medical Society, 1st Wednesday, February, April, June, August, October, December. John J. McCloskey, Secy., 3003 Short Cut Rd., Pascagoula 39567. County: Jackson.

South Central Mississippi Medical Society, 2nd Tuesday, March, June, September, December. Julian T. Janes, Secy., 304 Clark, McComb 39648. Counties: Copiah, Franklin, Lawrence, Lincoln, Pike, Walthall.

South Mississippi Medical Society, 2nd Thursday, March, June, September, December. George R. Bush, Secy., 307 S. 13th Ave., Laurel 39440. Counties: Covington, Forrest, George, Greene, Jasper, Jefferson Davis, Jones, Lamar, Marion, Perry, Smith, Wayne.

West Mississippi Medical Society, 2nd Tuesday, January, March, May, September, October, November, 6:30 p.m., Maxwell's Restaurant, Vicksburg. Martin E. Hinman, Secy., The Street Clinic, Vicksburg 39180. Counties: Issaquena, Sharkey, Warren.

Mississippi Institutions and Organizations Accredited for Continuing Medical Education

The following Mississippi institutions and medical organizations have been accredited in accordance with the "Essentials for Accreditation of Institutions and Organizations Offering Continuing Medical Education Programs" of the Liaison Committee on Continuing Medical Education. Information concerning CME programs for physicians offered by these accredited sources may be obtained by writing the Director, Continuing Medical Education, at the individual institution or organization.

Council on Scientific Assembly Mississippi State Medical Association 735 Riverside Drive Jackson, MS 39202	Northwest Mississippi Regional Medical Center Box 1218 Clarksdale, MS 38614
North Mississippi Medical Center 830 Gloster Avenue Tupelo, MS 38801	North Panola County Hospital Drawer 160 Sardis, MS 38666
Forrest General Hospital Box 1897 Hattiesburg, MS 39401	Singing River Hospital P.O. Box 112 Pascagoula, MS 39567
Mississippi Baptist Medical Center 1225 N. State Street Jackson, MS 39201	Magnolia Hospital Alcorn Drive Corinth, MS 38834
Gulf Coast Community Hospital 4642 W. Beach Boulevard Biloxi, MS 39531	Greenwood Leflore Hospital 1508 Leflore Avenue Greenwood, MS 38930
Jefferson Davis Memorial Hospital Box 1488 Natchez, MS 39120	Gulfport Memorial Hospital 4500 13th Street Gulfport, MS 39501
King's Daughter Hospital Box 948 Brookhaven, MS 39601	Oxford-Lafayette County Hospital P.O. Box 946 Oxford, MS 38655
Riverside Hospital Lakeland Drive Jackson, MS 39208	St. Dominic-Jackson Memorial Hospital 969 Lakeland Dr. Jackson, MS 39216
Biloxi Regional Medical Center 1559 Lafayette St. Biloxi, MS 39533	Delta Medical Center P.O. Box 5247 Crossroads Station Greenville, MS 39704-5247
Jeff Anderson Regional Medical Center 2124 14th St. Meridian, MS 39301	Methodist Hospital P.O. Box 1311 Hattiesburg, MS 39401

PERSONALS

ORLANDO ANDY of UMC presented an abstract at the American Medical EEG Association meeting in Savannah, Georgia, and made a presentation at the International Workshop on Human Neurostimulation in Glen Cove, New York.

BLAIR BATSON of UMC attended an executive board meeting of the Vanderbilt Medical Alumni Association in Nashville, and participated in the program of the American Public Health Association meeting in New Orleans. He also was examiner for the American Board of Pediatrics in Philadelphia.

J. STEPHEN BEAM announces the opening of the Hattiesburg Family Medical Center in association with Hattiesburg's Urgent Care Center.

BRYAN COWAN of UMC was a panelist for the American Fertility Society annual meeting in Reno, Nevada.

SUMAN K. DAS of UMC presented a paper at the annual meeting of the American Association for Hand Surgery in San Juan, Puerto Rico, and at the American Association of Plastic and Reconstructive Surgeons meeting in Atlanta.

OWEN EVANS of UMC was guest lecturer at the National Children's Hospital in Washington, DC; Keesler Air Force Base Hospital in Biloxi; Metropolitan State Hospital in Norwalk, California; and Camarillo State Hospital in Camarillo, California.

J. D. FLY of Jackson has been named president of the Mississippi Chapter, American Diabetes Association.

ELMO GABBERT of Meadville has been recertified as a diplomate of the American Board of Family Practice.

JUDY GEARHART of UMC spoke at the Florida Family Practice Update in Orlando, Florida.

JAMES E. GRIFFITH of Jackson has been named president of the Mississippi Thoracic Society. Other officers are WILLIAM C. KELLUM of Tupelo, vice president, and HUGH A. GAMBLE of Greenville, secretary-treasurer.

LARRY J. HAMMETT of Hattiesburg has been named a fellow of the American Academy of Otolaryngic Allergy.

JAMES HARDY of UMC presided at a meeting of the International Society of Surgery in Sydney, Australia.

JAMES HUGHES of UMC was speaker at a workshop on internal fixation in Atlanta and was visiting professor at the University of Pennsylvania in Philadelphia.

ROBERT JORDEN of UMC was a consultant to the NIAAA steering committee of the American College of Emergency Physicians in Monterey, California, and also was consultant for the Emergency Medical Section of the Southern Medical Association at its meeting in San Francisco.

HERBERT LANGFORD of UMC made presentations at the 41st annual fall conference of the Council for High Blood Pressure Research in New Orleans.

RICK MARTIN of UMC made a presentation at the American Academy of Pediatrics meeting in New Orleans and at the Southern Medical Association meeting in San Antonio.

JOHN MORRISON of UMC conducted grand rounds at St. Margaret's Hospital in Boston.

JOHN C. MUTZIGER of Philadelphia was elected president of the Mississippi Osteopathic Medical Association for 1987-88. Other officers are RICK

**For bulk prices without the bulk,
come to the Source.**

Contract Supplies at

OffiSource

*Business Furnishings / Supplies / Machines
277 E. Pearl St. / Jackson, MS 39205
352-9000 / Toll-free 1-800-682-5399*

PEDEN of Gulfport, vice-president; ERIC DAHL of Oxford, secretary-treasurer; and KIM KIRKLAND of Starkville, program chairman.

NORMAN NELSON of UMC spoke to the Alpha Epsilon Delta chapter at the University of Mississippi.

WILLIAM C. NICHOLAS of UMC participated in the 22nd Conjoint Assembly at Dalhousie University, Nova Scotia, Canada.

ANDREW PARENT of UMC presented a paper at the fourth European Workshop on Pituitary Adenomas in Barcelona, Spain, and presented an abstract at the Neuro-endocrinological Symposium on Secreting Pituitary Adenomas in Montreal, Canada.

HERNANDO PAYNE of Greenville has been recertified as a diplomate of the American Board of Family Practice.

JAMES S. POOLE of Gloster has been recertified as a diplomate of the American Board of Family Practice.

KELLY S. SEGARS, SR. of Iuka presented a seminar at Patient Conference IX in Kansas City, Missouri, which was sponsored by the American Academy of Family Practice, Society of Teachers of Family Medicine, and St. Mary's Hospital.

ROBERT SMITH of UMC made a presentation at the American College of Surgeons meeting in San Francisco and attended the executive meeting of the Stroke Council in Dallas.

JOHN TANKSLEY of Greenville has been named a fellow of the American Academy of Orthopaedic Surgery.

MAX TAYLOR of Tupelo presented a lecture on AIDS at Verona United Methodist Church.

FRAZIER WARD of UMC was guest faculty for a workshop on Locked Intramedullary Nailing in Biloxi.

JOHN WOFFORD, JR. of Jackson presented two lectures on HIV infection at University Medical Center.

The editors invite your comments, inquiries, and suggestions. Please address letters to the Editors, *Journal of the Mississippi State Medical Association*, P.O. Box 5229, Jackson, MS 39216.

The Most Logical Choice



Medical Office Management System

Designed to meet the information needs of the individual practice or large group, physicians across the country are enjoying increased revenue, more accurate financial reporting, and total control of their accounts receivable with MDlogic's variety of features including . . .

- On-line patient inquiry
- On-line transaction posting
- Batch posting
- Insurance Claim Tracking
- Cycle Billing
- Collection Letters
- Appointment Scheduling
- Electronic Claims Submission
- Hospital Census Reporting
- Procedure & Diagnosis History
- Comprehensive Revenue and Service Reports
- Patient Recall
- Payment Allocation
- General Ledger
- Accounts Payable
- Payroll
- And Much More

For more information, call or write

DP Associates

805 S. Wheatley, Suite 325
Ridgeland, MS 39157-9983

(601) 957-3299

President's Page

(Continued from page 18)

pendence are substantially antithetical. However, there are times when it becomes a sensible exercise of independence to voluntarily subordinate one's autonomy and one's narrow self interest to worthy group efforts. One such group which is deserving of the unified support of physicians is your medical association.

A group of members still object to the unification of MSMA-AMA membership which was adopted by the MSMA House of Delegates in 1986. Most opposition to unification relates to disagreements with AMA policies and, as a matter of principle, to the loss of freedom to decide to join or not join AMA. As a practical matter, 75% of MSMA members were AMA members prior to unification. All of these members have received a reduction in dues because of unification in addition to the other values of membership in the two organizations. (A list of benefits which physicians derive from AMA appears at the end of this article.) Many of these benefits are shared by member and non-member physicians alike and by the American people. Another practical fact is that the Mississippi State Medical Association cannot stand alone in this environment and still be an effective instrument of the policy of Mississippi physicians. Component medical societies, state medical societies and AMA are so vertically integrated and so interdependent that they

are, indeed, component parts of *one* organization. On that basis, and on the basis of value received, unified membership seems to be a logical choice.

Nevertheless, the objections to unified membership which have been voiced should be taken seriously. I am willing to concede that unification of membership is a controversial issue which is worthy of debate. Fortunately, we have a healthy forum for such debate; namely, the reference committees and House of Delegates of MSMA.

I come now to my final point in this plea for unity. The AMA cannot always please everyone, because it serves a diverse constituency and because it is subject to financial, political, and legal constraints. On many occasions, as an AMA delegate, I, myself, have been on the losing side of contested issues. Often, I have felt that the prevailing view was wrong. Nevertheless, I have always been impressed that the political process, per se, which is followed by the House has great integrity. The officers and staff of AMA are truly responsive to the House of Delegates. And the House of Delegates is truly representative of physicians in this country. All arguments are freely heard in reference committees and on the floor of the House before votes are taken. The House of Delegates of the AMA is a unique and remarkably competent mechanism for defining issues, resolving conflict, and making policy. Without it, there would be little hope for physicians in the United States to defy the prophesy of Mr. Waterman.

AMA Membership Benefits

Here are a few of the outstanding personal and professional benefits the AMA offers members:

- Representation in Washington
- JAMA
- AM NEWS
- Specialty Journals
- AMA Library
- Medical Information Network
- Scientific Publications
- Socioeconomic Publications
- Video Clinics
- Physician Recognition Awards
- Practice Management Workshops
- Practice Management Audiovisual Library
- Practice Management Publications
- Physicians' Placement Service
- Insurance Program
- Members' Retirement Plan
- VISA Premier Card
- Hertz Rental Car Discount
- Health Education Pamphlets
- AMA Home Health Library
- Patient Medication Instruction Sheets

Before prescribing, see complete prescribing information in SK&F LAB CO. literature or PDR. The following is a brief summary.

Contraindications: There are no known contraindications to the use of 'Tagamet'.

Precautions: While a weak antiandrogenic effect has been demonstrated in animals, 'Tagamet' has been shown to have no effect on spermatogenesis, sperm count, motility, morphology or in vitro fertilizing capacity in humans.

In a 24-month toxicity study in rats at dose levels approximately 9 to 56 times the recommended human dose, benign Leydig cell tumors were seen. These were common in both the treated and control groups, and the incidence became significantly higher only in the aged rats receiving 'Tagamet'.

Rare instances of cardiac arrhythmias and hypotension have been reported following the rapid administration of 'Tagamet' HCl (brand of cimetidine hydrochloride) injection by intravenous bolus.

Symptomatic response to 'Tagamet' therapy does not preclude the presence of a gastric malignancy. There have been rare reports of transient healing of gastric ulcers despite subsequently documented malignancy.

Reversible confusional states have been reported on occasion, predominantly in severely ill patients.

'Tagamet' has been reported to reduce the hepatic metabolism of warfarin-type anticoagulants, phenytoin, propranolol, chlordiazepoxide, diazepam, lidocaine, theophylline and metronidazole. Clinically significant effects have been reported with the warfarin anticoagulants; therefore, close monitoring of prothrombin time is recommended, and adjustment of the anticoagulant dose may be necessary when 'Tagamet' is administered concomitantly. Interaction with phenytoin, lidocaine and theophylline has also been reported to produce adverse clinical effects.

However, a crossover study in healthy subjects receiving either 'Tagamet' 300 mg. q.i.d. or 800 mg. h.s. concomitantly with a 300 mg. b.i.d. dosage of theophylline (Theo-Dur®, Key Pharmaceuticals, Inc.),

demonstrated less alteration in steady-state theophylline peak serum levels with the 800 mg. h.s. regimen, particularly in subjects aged 54 years and older. Data beyond ten days are not available. (Note: All patients receiving theophylline should be monitored appropriately, regardless of concomitant drug therapy.)

Lack of experience to date precludes recommending 'Tagamet' for use in pregnant patients, women of childbearing potential, nursing mothers or children under 16 unless anticipated benefits outweigh potential risks; generally, nursing should not be undertaken in patients taking the drug since cimetidine is secreted in human milk.

Adverse Reactions: Diarrhea, dizziness, somnolence, headache, rash. Reversible arthralgia, myalgia and exacerbation of joint symptoms in patients with preexisting arthritis have been reported. Reversible confusional states (e.g., mental confusion, agitation, psychosis, depression, anxiety, hallucinations, disorientation), predominantly in severely ill patients, have been reported. Gynecomastia and reversible impotence in patients with pathological hypersecretory disorders receiving 'Tagamet', particularly in high doses, for at least 12 months, have been reported. Reversible alopecia has been reported very rarely. Decreased white blood cell counts in 'Tagamet'-treated patients (approximately 1 per 100,000 patients), including agranulocytosis (approximately 3 per million patients), have been reported, including a few reports of recurrence on rechallenge. Most of these reports were in patients who had serious concomitant illnesses and received drugs and/or treatment known to produce neutropenia. Thrombocytopenia (approximately 3 per million patients) and a few cases of aplastic anemia have also been reported. Increased serum transaminase and creatinine, as well as rare cases of fever, interstitial nephritis, urinary retention, pancreatitis and allergic reactions, including hypersensitivity vasculitis, have been reported. Reversible adverse hepatic effects, cholestatic or mixed cholestatic-hepatocellular in nature, have been reported rarely. Because of the predominance of cholestatic features, severe parenchymal injury is considered highly un-

likely. A single case of biopsy-proven periportal hepatic fibrosis in a patient receiving 'Tagamet' has been reported.

How Supplied: Tablets: 200 mg. tablets in bottles of 100; 300 mg. tablets in bottles of 100 and Single Unit Packages of 100 (intended for institutional use only); 400 mg. tablets in bottles of 60 and Single Unit Packages of 100 (intended for institutional use only), and 800 mg. Tiltab® tablets in bottles of 30 and Single Unit Packages of 100 (intended for institutional use only).

Liquid: 300 mg./5 ml., in 8 fl. oz. (237 ml.) amber glass bottles and in single-dose units (300 mg./5 ml.), in packages of 10 (intended for institutional use only).

Injection:

Vials: 300 mg./2 ml. in single-dose vials, in packages of 10 and 30, and in 8 ml. multiple-dose vials, in packages of 10 and 25.

Prefilled Syringes: 300 mg./2 ml. in single-dose prefilled disposable syringes.

Plastic Containers: 300 mg. in 50 ml. of 0.9% Sodium Chloride in single-dose plastic containers, in packages of 4 units. No preservative has been added.

ADD-Vantage® Vials: 300 mg./2 ml. in single-dose, ADD-Vantage® Vials, in packages of 25.

Exposure of the premixed product to excessive heat should be avoided. It is recommended the product be stored at controlled room temperature. Brief exposure up to 40°C does not adversely affect the premixed product.

'Tagamet' HCl (brand of cimetidine hydrochloride) Injection premixed in single-dose plastic containers is manufactured for SK&F Lab Co. by Travenol Laboratories, Inc., Deerfield, IL 60015.

* ADD-Vantage® is a trademark of Abbott Laboratories.

BRS-TG-L73B

Date of Issuance Apr. 1987

SK&F LAB CO.

Cidra, P.R. 00639

© SK&F Lab Co., 1988

In peptic ulcer:

**RELIEF
REASSURANCE
REWARD**



Tagamet®
brand of cimetidine
First to Heal

You'll both feel good about it.

RESULTS

A better alternative for hypertensives who are going bananas...

Spare your patients the extra cost—
in calories, sodium and dollars.

Spare your patients the rigors of
dietary K⁺ supplementation.

DYAZIDE®

25mg Hydrochlorothiazide/50mg Triamterene/SKF

Effective antihypertensive* therapy...without the bananas

DAW
'DYAZIDE' AS WRITTEN.

* Not for initial therapy. See brief summary.

Before prescribing, see complete
prescribing information in
SK&F CO. literature or PDR.
The following is a brief summary.

WARNING

This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

Contraindications: Concomitant use with other potassium-sparing agents such as spironolactone or amiloride. Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.
Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K⁺ levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K⁺ intake. Associated widened QRS complex or arrhythmia requires prompt additional therapy. Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available. Sensitivity reactions may occur in patients with or

without a history of allergy or bronchial asthma. Possible exacerbation or activation of systemic lupus erythematosus has been reported with thiazide diuretics.

Precautions: The bioavailability of the hydrochlorothiazide component of 'Dyazide' is about 50% of the bioavailability of the single entity. Theoretically, a patient transferred from the single entities of triamterene and hydrochlorothiazide may show an increase in blood pressure or fluid retention. Similarly, it is also possible that the lesser hydrochlorothiazide bioavailability could lead to increased serum potassium levels. However, extensive clinical experience with 'Dyazide' suggests that these conditions have not been commonly observed in clinical practice. Angiotensin-converting enzyme (ACE) inhibitors can elevate serum potassium; use with caution with 'Dyazide'. Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids, and during concurrent use with amphotericin B or corticosteroids or corticotropin[ACTH]). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Cumulative effects of the drug may develop in patients with impaired renal function. Thiazides should be used with caution in patients with impaired hepatic function. They can precipitate coma in patients with severe liver disease. Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic and hemolytic anemia have been reported with thiazides. Thiazides may cause manifestation of latent diabetes mellitus. The effects of oral anticoagulants may be decreased when used concurrently with hydrochlorothiazide; dosage adjustments may be necessary. Clinically insignificant reductions in arterial responsiveness to norepinephrine have been reported. Thiazides have also been shown to increase the paralyzing effect of nondepolarizing muscle relaxants such as tubocurarine. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. Triamterene has been found in renal stones in association with the other usual calculus components. Therefore, 'Dyazide' should be used with caution in patients with histories of stone formation. A few occurrences of acute renal failure have been reported in patients on 'Dyazide' when treated with indomethacin. Therefore, caution is advised in administering nonsteroidal anti-inflammatory agents with 'Dyazide'. The

following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine. Hypokalemia is uncommon with 'Dyazide', but should it develop, corrective measures should be taken such as potassium supplementation or increased dietary intake of potassium-rich foods. Corrective measures should be instituted cautiously and serum potassium levels determined. Discontinue corrective measures and 'Dyazide' should laboratory values reveal elevated serum potassium. Chloride deficit may occur as well as dilutional hyponatremia. Concurrent use with chlorpropamide may increase the risk of severe hyponatremia. Serum PBI levels may decrease without signs of thyroid disturbance. Calcium excretion is decreased by thiazides. 'Dyazide' should be withdrawn before conducting tests for parathyroid function. Thiazides may add to or potentiate the action of other antihypertensive drugs. Diuretics reduce renal clearance of lithium and increase the risk of lithium toxicity.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances; postural hypotension (may be aggravated by alcohol, barbiturates, or narcotics). Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and respiratory distress including pneumonitis and pulmonary edema, transient blurred vision, sialadenitis, and vertigo have occurred with thiazides alone. Triamterene has been found in renal stones in association with other usual calculus components. Rare incidents of acute interstitial nephritis have been reported. Impotence has been reported in a few patients on 'Dyazide', although a causal relationship has not been established.

Supplied: 'Dyazide' is supplied as a red and white capsule, in bottles of 1000 capsules; Single Unit Packages (unit-dose) of 100 (intended for institutional use only); in Patient-Pak™ unit-of-use bottles of 100.

BR5-DZ-L45

a product of
SK&F CO.
Citra, P.R. 00639

SK&F Co., 1987

Medico-Legal Brief

M.D. Must Pay \$78,000 Penalty For False Medicare Claim

A physician who wrongfully acquired \$549.04 in Medicare funds must pay a penalty of \$78,000 for submitting false Medicare claims, a federal trial court in New York ruled.

The physician was convicted on a total of 39 counts of submitting fraudulent Medicare claims. A jury found that he had illegally obtained \$549.04 through his unlawful acts. The government then filed an action against the physician seeking penalties under the False Claims Act.

The government sought forfeiture of \$2,000 for each false claim submitted and twice the amount of damages it had suffered. A trial court awarded the government \$1,098.08, twice the amount of money obtained by the physician. It also awarded \$78,000, representing \$2,000 for each of the 39 claims on which he was convicted.

The physician argued that there was no relationship between the amount of money that he obtained

by filing false claims and the \$78,000 forfeiture penalty. The court said that the penalty was required by statute and it had no discretion to either reduce the number of claims upon which the forfeiture was sought or the amount of the forfeiture award. — *U. S. v. Diamond*, 657 F.Supp. 1204 (D.C., N.Y., April 14, 1987)

DEATHS

HIGHTOWER, JESSE R., Itta Bena. Born Itta Bena, Oct. 20, 1905; M.D., Tulane University School of Medicine, New Orleans, 1936; interned one year, Baroness Erlanger Hospital, Chattanooga; TN; died Nov. 13, 1987, age 82.

PERSON, MILTON T., JR., Greenwood. Born Stockdale, TX, July 14, 1921; M.D., Tulane University School of Medicine, New Orleans, 1952; interned Charity Hospital, New Orleans, one year; general practice residency, Conway Hospital, Monroe, LA; one year; died Nov. 28, 1987, age 66.

MISSISSIPPI CHAPTER

Association of Consulting Foresters

When professional forestry services are



needed call a qualified consulting forester.



Attorneys, bankers, CPA's, doctors, and others know the value of utilizing the expertise of other professionals to help solve technical problems and to meet the needs of their clients. Their reputation and success depends on the quality of their advice.

Forestry is a complex and technical business; expert advice is often needed for appraisals, management, timber sales, reforestation, resource analysis, computer applications, taxes, legal, or estate questions.

You need a professional forester you can trust. Members of the Mississippi Association of Consulting Foresters provide complete and reputable services to forest landowners and related business professionals. The ACF designation is your assurance of high standards of training and ethics. For referral to the nearest ACF Consulting Forester, write or call MS Chapter of ACF, Route 2, Box 706, Starkville, MS 39759, 601-323-3896.

PLACEMENT SERVICE

PHYSICIANS AVAILABLE

BOARD CERTIFIED RADIOLOGIST available part time in Jackson or surrounding small community hospitals. Contact: Box Y, MSMA, P.O. Box 5229, Jackson, MS 39216.

PHYSICIAN COMPLETING RESIDENCY in obstetrics and gynecology seeks practice opportunity in Mississippi. Available July 1989. Contact Greg Patton, M.D., 2325 Glenmary Avenue #2, Louisville, KY 40204.

A Commitment to Excellence in Health Care

Mississippi Emergency Association, P.A. (MEA) a physician-owned and managed group has created an environment for physicians that promotes the ideals of private practice while freeing doctors from the administrative and financial demands of the private practitioner.

Board certified or board eligible physicians in the area of Emergency Medicine, Internal Medicine, and Family Medicine are presented a variety of professional and personal rewards, including excellent salaries, benefits, and advancement opportunities.

MEA is a dynamic, growing corporation that delivers quality health care. If you would like to know what career opportunities we can offer you, send your curriculum vitae to Sheila M. Stringer or call (601) 366-6503.

**Mississippi Emergency
Association, P.A.
P.O. Box 12917
Jackson, MS 39236-2917**

PHYSICIANS WANTED

EMERGENCY PHYSICIANS WANTED. Part-time and full-time positions in northeast Mississippi. Call (601) 328-8385.

FAMILY PHYSICIAN wanted for association in group practice. Contact R. N. Gilliland, M.D., Attala Medical Clinic, P.A., Kosciusko, MS 39090; phone 601/289-2411.

MULTI-SPECIALTY CLINIC seeks BC/BE Hematologist/Oncologist. Modern, fully equipped 220 bed hospital. Contact John Wallace, Internal Medicine Clinic, 1203 Jefferson Street, Laurel, MS; (601) 649-6382 or MS WATS 1-800-654-7918.

IMMEDIATE OPPORTUNITY for medical director and part-time physicians. Family/General/Internal Medicine/ER. Highest pay in the industry. Why work for less when you can work for the best? Call (601) 328-9623.

EXCELLENT TEXAS OPPORTUNITIES in Cardiology, ENT, Family Practice (5), General Surgery, Internal Medicine (2), Ob/Gyn (4), Oncology, Orthopedic Surgery (3), Pediatrics (2), Vascular Surgery, Industrial Medicine. Excellent quality of life, first year guarantee, etc. Reply with CV or call, Armando L. Frezza, Medical Support Services, 8806 Balcones Club Drive, Austin, TX 78750; (512) 331-4164.

PRIVATE PRACTICE OPPORTUNITY in small community 50 miles south of Atlanta. For more information contact Phillip Jordan, Administrator, Jasper Memorial Hospital and Nursing Home, Monticello, GA 31064. Phone (404) 468-6411.

120th Annual Session

June 15-19, 1988

Biloxi, Mississippi

Plan Now to Attend!

PHYSICIANS NEEDED

Physicians (especially specialists such as ophthalmologists, pediatricians, orthopedists, neurologists, etc.) interested in performing consultative evaluations (according to Social Security guidelines) should contact the Medical Relations Office. WATS 1-800-962-2230; Jackson, 922-6811; extensions 2276, 2330, and 2190.



DISABILITY DETERMINATION SERVICES
1-800-962-2230

CLASSIFIED

FOR SALE. Flexible fiberoptic sigmoidoscope, Reichert Model SC-5, 65 cm. With light source and biopsy forceps. Contact Dennis Bradburn, M.D., 992-4084.

MEDICAL EQUIPMENT. Medical supplies, office equipment, waiting room furniture including: x-ray machine in excellent condition, exam tables, EKG machine, tele-printer, flame photometer, like-new typewriter, loveseat, end tables, lamps, chairs, many more items too numerous to mention. *Best offer.* Inquire Columbus, MS (601/328-0830).

VISION BLOOD INSTRUMENT. Abbot Labs. Model 1537. \$15,000. Still in warranty. Call (601) 362-1577.

FOR SALE — ASSIST CHEMICAL ANALYZER. Performs any combination of 16 tests on 16 samples, in batch, profile, or random. Automatically performs all reagent and sample pipetting, measurements, calculating, and flags abnormal test results. Contact Charles J. Gruich, M.D., (601) 388-7080.

Index to Advertisers

Disability Determination	15	Postgraduate Medicine	24
DP Associates	31	Premier Printing	23
Harrel Chevrolet-Oldsmobile	26	Roche Laboratories	third, fourth covers
Eli Lilly and Company	12, 13	Smith Kline and French	32A, 32B
Marion Laboratories	6, 6A	Trustmark	25
Medical Assurance Co. of Miss.	4	The Upjohn Co.	6B
Mississippi Association of Foresters	33	U. S. Army	8
Mississippi Diagnostic Imaging Center	second cover	Jon Wimbish	10
Mississippi Emergency Association	34	Thomas Yates and Co.	16
MSMA Benefit Plan and Trust	14		
OffiSource	30		
Palisades Pharmaceuticals	28		



**Recommended for
MSMA Members**

Disability Income Protection \$30,000*

Tax Free Each Year When You Are Disabled

- **Broad Disability Definitions.**
- **Residual Disability Benefits** paid when you continue to suffer income loss upon return to work.
- **Inflation Protection Rider** helps replace buying power of your benefit lost to inflation.
- **Choice of Benefit Period.**
- **Choice of Waiting Period.**
- **Underwritten by **INN****

... Founded in 1792, Insurance Company of North America is one of the oldest and strongest insurance companies in the United States.

*** Based on \$2,500 Monthly Benefits**

Insurance With Innovation

For Complete Information Contact:

Thomas Yates & Co.

GROUP INSURANCE ADMINISTRATORS

P.O. Box 5048 • Suite 365 Woodland Hills Building • 3000 Old Canton Road • Jackson, MS 39216

(601) 366-2406

See the improvement in the first week¹

- Sleep improvement in 74% of patients after first h.s. dose²
- Significantly faster relief—62% of total four-week improvement evident in first week versus 44% with amitriptyline alone¹
- Dramatic first-week reduction in somatic complaints²

% Reduction in Somatic Symptoms²

Vomiting	Nausea	Headache	Anorexia	Constipation
Reduced 90%	Reduced 86%	Reduced 72%	Reduced 62%	Reduced 60%

- Only 1/3 the dropout rate due to side effects of amitriptyline alone, although the incidence of side effects is similar¹

Caution patients about the combined effects of Limbitrol with alcohol or other CNS depressants and about activities requiring complete mental alertness, such as operating machinery or driving a car. In general, limit dosage to the lowest effective amount in elderly patients.

Copyright © 1987 by Roche Products Inc. All rights reserved.



Protect your decision.
Write "Do not substitute."

In moderate depression and anxiety

Limbitrol[®]

Each tablet contains 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt)

Limbitrol[®] DS

Each tablet contains 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt)

References: 1. Feighner JP, et al. *Psychopharmacology* 61:217-225, Mar 22, 1979. 2. Data on file, Hoffmann-La Roche Inc., Nutley, NJ.

Limbitrol[®] Tranquilizer—Antidepressant

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of moderate to severe depression associated with moderate to severe anxiety.

Contraindications: Known hypersensitivity to benzodiazepines or tricyclic antidepressants. Do not use with monoamine oxidase (MAO) inhibitors or within 14 days following discontinuation of MAO inhibitors since hyperpyretic crises, severe convulsions and deaths have occurred with concomitant use, then initiate cautiously, gradually increasing dosage until optimal response is achieved. Contraindicated during acute recovery phase following myocardial infarction.

Warnings: Use with great care in patients with history of urinary retention or angle-closure glaucoma. Severe constipation may occur in patients taking tricyclic antidepressants and anticholinergic-type drugs. Closely supervise cardiovascular patients (Arrhythmias, sinus tachycardia and prolongation of conduction time reported with use of tricyclic antidepressants, especially high doses. Myocardial infarction and stroke reported with use of this class of drugs.) Caution patients about possible combined effects with alcohol and other CNS depressants and against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving).

Use in Pregnancy: Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Since physical and psychological dependence to chlordiazepoxide have been reported rarely, use caution in administering Limbitrol to addiction-prone individuals or those who might increase dosage, withdrawal symptoms following discontinuation of either component alone have been reported (nausea, headache and malaise for amitriptyline; symptoms [including convulsions] similar to those of barbiturate withdrawal for chlordiazepoxide).

Precautions: Use with caution in patients with a history of seizures, in hyperthyroid patients or those on thyroid medication, and in patients with impaired renal or hepatic function. Because of the possibility of suicide in depressed patients, do not permit easy access to large quantities in these patients. Periodic liver function tests and blood counts are recommended during prolonged treatment. Amitriptyline component may block action of guanethidine or similar antihypertensives. When tricyclic antidepressants are used concomitantly with cimetidine (Togamet), clinically significant effects have been reported involving delayed elimination and increasing steady state concentrations of the tricyclic drugs. Concomitant use of Limbitrol with other psychotropic drugs has not been evaluated, sedative effects may be additive. Discontinue several days before surgery. Limit concomitant administration of ECT to essential treatment. See Warnings for precautions about pregnancy. Limbitrol should not be taken during the nursing period. Not recommended in children under 12. In the elderly and debilitated, limit to smallest effective dosage to preclude ataxia, oversedation, confusion or anticholinergic effects.

Adverse Reactions: Most frequently reported are those associated with either component alone: drowsiness, dry mouth, constipation, blurred vision, dizziness and bloating. Less frequently occurring

reactions include vivid dreams, impotence, tremor, confusion and nasal congestion. Many depressive symptoms including anorexia, fatigue, weakness, restlessness and lethargy have been reported as side effects of both Limbitrol and amitriptyline. Granulocytopenia, jaundice and hepatic dysfunction have been observed rarely.

The following list includes adverse reactions not reported with Limbitrol but requiring consideration because they have been reported with one or both components or closely related drugs.

Cardiovascular: Hypotension, hypertension, tachycardia, palpitations, myocardial infarction, arrhythmias, heart block, stroke.

Psychiatric: Euphoria, apprehension, poor concentration, delusions, hallucinations, hypomania and increased or decreased libido.

Neurologic: Incoordination, ataxia, numbness, tingling and paresthesias of the extremities, extrapyramidal symptoms, syncope, changes in EEG patterns.

Anticholinergic: Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract.

Allergic: Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus.

Hematologic: Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia.

Gastrointestinal: Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, black tongue.

Endocrine: Testicular swelling and gynecomastia in the male, breast enlargement, galactorrhea and minor menstrual irregularities in the female, elevation and lowering of blood sugar levels, and syndrome of inappropriate ADH (antidiuretic hormone) secretion.

Other: Headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, jaundice, ataxia, parotid swelling.

Overdose: Immediately hospitalize patient suspected of having taken an overdose. Treatment is symptomatic and supportive. IV administration of 1 to 3 mg physostigmine salicylate has been reported to reverse the symptoms of amitriptyline poisoning. See complete product information for manifestation and treatment.

Dosage: Individualize according to symptom severity and patient response. Reduce to smallest effective dosage when satisfactory response is obtained. Larger portion of daily dose may be taken at bedtime. Single h.s. dose may suffice for some patients. Lower dosages are recommended for the elderly. Limbitrol DS (double strength) Tablets, initial dosage of three or four tablets daily in divided doses, increased up to six tablets or decreased to two tablets daily as required. Limbitrol Tablets, initial dosage of three or four tablets daily in divided doses, for patients who do not tolerate higher doses.

How Supplied: Double strength (DS) Tablets, white, film-coated, each containing 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt), and Tablets, blue, film-coated, each containing 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt). Available in bottles of 100 and 500, Tel-E-Dose[®] packages of 100, Prescription Paks of 50.



ROCHE PRODUCTS INC.
Nutley, Puerto Rico 00701

The rewards of Limbitrol You're both smiling again

See the improvement in the first week¹

In depressed and anxious patients, you can see the difference sooner—62% of total four-week improvement achieved in the first week with Limbitrol versus 44% with amitriptyline.¹

In moderate depression and anxiety

Limbitrol[®]

Each tablet contains 5 mg clordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt) (IV)

Limbitrol[®] DS

Each tablet contains 10 mg clordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt) (IV)

ROCHE

Please see summary of product information on adjacent page.

JOURNAL

OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION

FEBRUARY

1988

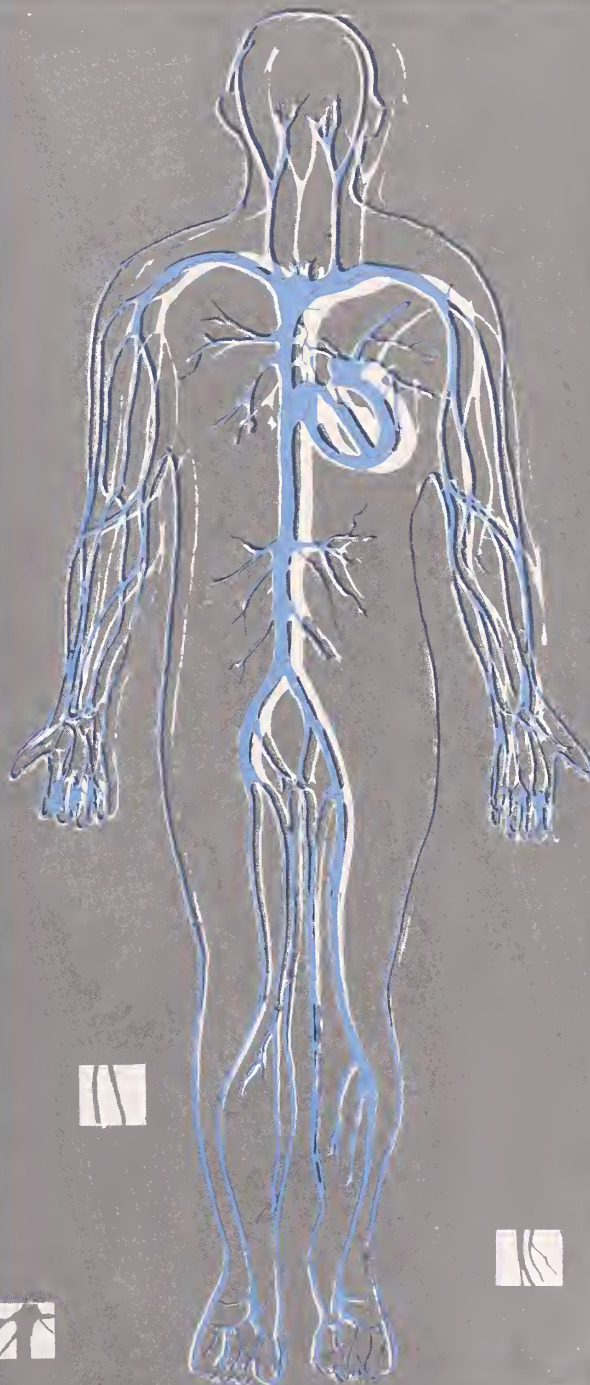
What Everybody Should Know About Vascular Trauma

Also in this issue:

The Miniature Battery:
A New Foreign Body
Hazard

Radiological Seminar
CCXLIX:
The Role of Radiographic
Evaluation in the Diagnosis
of Epiglottitis

Myelomeningocele:
Adolescence/Sexuality/
Vocational Skills



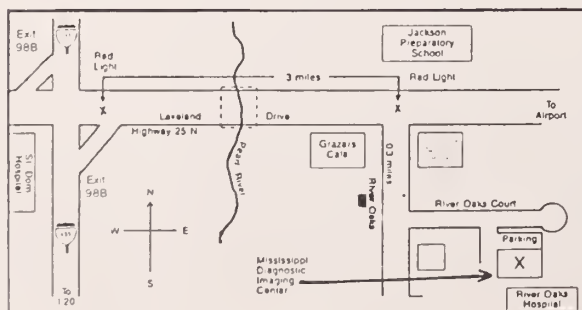
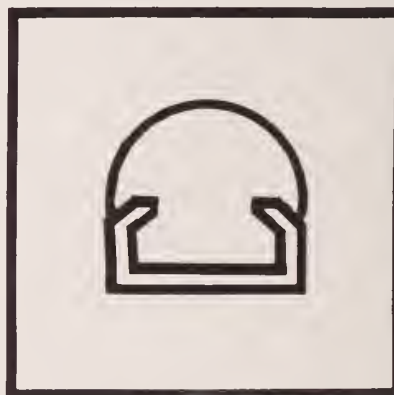
James Grant Thompson Memorial Lecture

MISSISSIPPI DIAGNOSTIC IMAGING CENTER

**Magnetic Resonance Imaging
Computed Tomography (CT)
Diagnostic X-Ray**

First to Offer MRI in Mississippi

Hours: Monday - Friday by appointment (601) 932-3722
1-800-843-7681



Out Patient Diagnostic Clinic

**MISSISSIPPI
DIAGNOSTIC IMAGING CENTER**

103 River Oaks Court
Post Office Box 97269
Flowood, Mississippi 39208
Jackson Area 601-932-3722
Outside Jackson Toll-Free
1-800-843-7681

JOURNAL

OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION

FEBRUARY 1988

VOLUME XXIX

NUMBER 2

SCIENTIFIC

- The 1987 James Grant Thompson
Lecture: What Everybody Should
Know About Vascular Trauma** 35
Kaj Johansen, M.D.
- The Miniature Battery:
A New Foreign Body Hazard** 41
C. Ron Cannon, M.D.
- Radiological Seminar CCXLIX:
The Role of Radiographic Evaluation
in the Diagnosis of Epiglottitis** 43
*Jennifer H. Turner, M.D. and
Bernard I. Blumenthal, M.D.*
- Myelomeningocele: Adolescence/
Sexuality/Vocational Skills** 45
William A. Long, Jr., M.D.

EDITOR

Myron W. Lockey, M.D.

EDITOR EMERITUS

W. Moncure Dabney, M.D.

ASSOCIATE EDITORS

Arthur A. Derrick, Jr., M.D.

Joseph E. Johnston, M.D.

MANAGING EDITOR

Patsy Silver

PUBLICATIONS COMMITTEE

Richard C. Miller, M.D.,
Chairman

George H. Martin, M.D.

William J. Gibson, M.D.
and the editors

THE ASSOCIATION

W. Lamar Weems, M.D.
President

David R. Steckler, M.D.
President-Elect

Don Q. Mitchell, M.D.
Secretary-Treasurer

James C. Waites, M.D.
Speaker

H. Vann Craig, M.D.
Vice Speaker

Charles L. Mathews
Executive Director

EDITORIALS

- Politics as Unusual** 48
W. Lamar Weems, M.D.
- The Ole Grey Flipper** 51
Joseph E. Johnston, M.D.

DEPARTMENTS

- Letters** 52
- Organization News** 53
- Personals** 57
- New Members** 59
- Medico-Legal Brief** 65
- Placement Service** 66

Copyright© 1988, Mississippi State Medical Association. The views expressed in this publication reflect the opinions of the authors and do not necessarily state the opinions or policies of the Mississippi State Medical Association.

THE JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION (ISSN 0026-6393) is owned and published monthly by the Mississippi State Medical Association, founded 1856, at 735 Riverside Drive, Jackson, Mississippi 39202. Subscription rate, \$25.00 per annum; \$35.00 per annum for foreign subscriptions; \$2.25 per copy, as available. Advertising rates furnished on request. Printed by The Ovid Bell Press, Inc., Fulton, Missouri. Second-class postage paid at Jackson, Mississippi, and at additional mailing offices. POSTMASTER: Send address changes to Mississippi State Medical Association, P.O. Box 5229, Jackson, Mississippi 39216.



“When I realized my chances of becoming disabled by age 65 were *three times greater* than the chances of death . . .

I compared disability insurance plans. And I decided that my MSMA-endorsed disability insurance plan

SERVES ME BEST!

It's not group insurance, but an individually-owned policy which is *non-cancellable* and *guaranteed renewable*.”

If you're a member of the Mississippi State Medical Association you may be eligible for this outstanding professional disability plan at *discounted premiums*.

- Non-cancellable, guaranteed renewable
- Medical specialty protection
- Presumptive loss provision
- Indexing of prior earnings
- Waiver of premium
- Cost of living rider
- Future disability insurance option
- Lifetime accident and sickness rider
- Total and residual disability protection

Offered by Paul Revere Insurance Company to MSMA members through its exclusive representatives, Professional Disability Specialists.

Jon B. Wimbish, Disability Specialist

1501 Lakeland Drive, Suite 200

Jackson, MS 39216

Telephone 362-9800

NEWSLETTER

February 1988

Dear Doctor:

A coalition of almost fifty business and professional associations has been formed for the purpose of seeking reform of Mississippi's civil justice laws. The coalition has developed a package of bills which will be presented to the legislature this session. Items contained in the package include a Medical Malpractice Reform bill, as well as legislation to abolish joint and several liability, provide for collateral source reductions, cap non-economic and punitive damages, regulate contingent fees, provide for periodic payment of future damages, and shorten the statute of limitations.

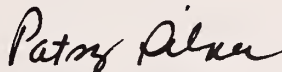
This month's President's Page includes suggestions on how you can effectively become involved in the legislative process. Call the MSMA headquarters office if you need information about proposed legislation.

The 1988 Legislative Forum, sponsored by MSMA, MS Hospital Association, and the Association of Hospital Governing Boards, was a big success. More than 600 physicians, hospital board members and administrators from across the state gathered in Jackson on January 20 for a legislative program and reception for lawmakers.

A study of federal employees and their families concludes that treatment of mental and emotional disorders significantly reduces total medical care costs. The study, reported in Hospital and Community Psychiatry, compared 26,915 families in which at least one member received mental health treatment with 16,468 similar families in which no member had received such treatment. Utilization of health care services, which had increased prior to mental health treatment, dropped after treatment was begun. This was true not only for the individuals, but also for their family members.

URGENT NOTE: Blood supplies are extremely low in many areas of the state. Please take time to donate a unit of blood to your local blood service, and encourage your patients, family and friends to do the same.

Sincerely,



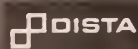
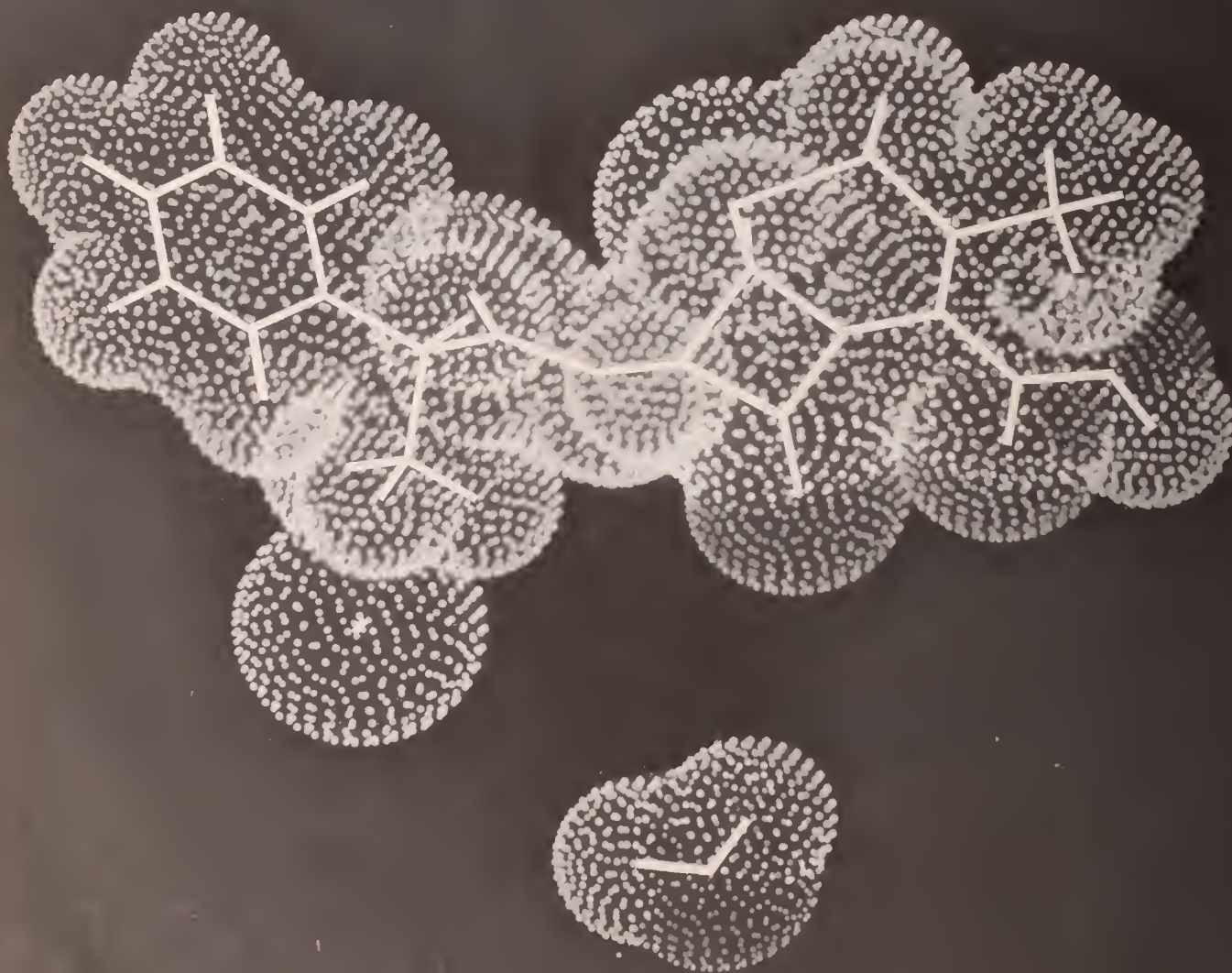
Patsy Silver
Managing Editor

ANNOUNCING

NEW

KEFTABTM

cephalexin hydrochloride monohydrate



Dista Products Company
Division of Eli Lilly and Company
Indianapolis, Indiana 46285
Mfd by Eli Lilly Industries, Inc
Carolina, Puerto Rico 00630

© 1987, DISTA PRODUCTS COMPANY KX-9008-B-849235

Computer-generated molecular
structure of cephalexin
hydrochloride monohydrate

Convenient 500-mg b.i.d. dosage and demonstrated effectiveness for treatment of:

- skin and skin structure infections*
- uncomplicated cystitis†
- pharyngitis‡

- New hydrochloride salt form of cephalexin—requires no conversion in the stomach before absorption
- Well-tolerated therapy
- May be taken without regard to meals



For other indicated infections, 250-mg tablets available for q.i.d. dosage

Priced less than Keflex® (cephalexin)

Keftab is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-sensitive patients.

Penicillin is the drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever.

Due to susceptible strains of *Staphylococcus aureus* and/or β -hemolytic streptococci.
Due to susceptible strains of *Escherichia coli*, *Proteus mirabilis*, and *Klebsiella* sp.
Due to susceptible strains of group A β -hemolytic streptococci.

KEFTAB™

(cephalexin hydrochloride monohydrate)

Summary: Consult the package literature for prescribing information.

Indications and Usage:

Respiratory tract infections caused by susceptible strains of *Streptococcus pneumoniae* and group A β -hemolytic streptococci.

Skin and skin structure infections caused by susceptible strains of *Staphylococcus aureus* and/or β -hemolytic streptococci.

Bone infections caused by susceptible strains of *S aureus* and/or *Proteus mirabilis*.

Genitourinary tract infections, including acute prostatitis, caused by susceptible strains of *Escherichia coli*, *P mirabilis*, and *Klebsiella* sp.

Contraindication: Known allergy to cephalosporins.

Warnings: KEFTAB SHOULD BE ADMINISTERED CAUTIOUSLY TO PENICILLIN-SENSITIVE PATIENTS. PENICILLINS AND CEPHALOSPORINS SHOW PARTIAL CROSS-ALLERGENICITY. POSSIBLE REACTIONS INCLUDE ANAPHYLAXIS.

Administer cautiously to allergic patients.

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics. It must be considered in differential diagnosis of antibiotic-associated diarrhea. Colon flora is altered by broad-spectrum antibiotic treatment, possibly resulting in antibiotic-associated colitis.

Precautions:

- Discontinue Keftab in the event of allergic reactions to it.
- Prolonged use may result in overgrowth of nonsusceptible organisms.
- Positive direct Coombs' tests have been reported during treatment with cephalosporins.
- Keftab should be administered cautiously in the presence of markedly impaired renal function. Although dosage adjustments in moderate to severe renal impairment are usually not required, careful clinical observation and laboratory studies should be made.
- Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.
- Safety and effectiveness have not been determined in pregnancy and lactation. Cephalexin is excreted in mother's milk. Exercise caution in prescribing Keftab for these patients.
- Safety and effectiveness in children have not been established.

Adverse Reactions:

- *Gastrointestinal*, including diarrhea and, rarely, nausea and vomiting. Transient hepatitis and cholestatic jaundice have been reported rarely.
- *Hypersensitivity* in the form of rash, urticaria, angioedema, and, rarely, erythema multiforme, Stevens-Johnson syndrome, or toxic epidermal necrolysis.
- *Anaphylaxis* has been reported.
- *Other reactions* have included genital/anal pruritus, genital moniliasis, vaginitis/vaginal discharge, dizziness, fatigue, headache, eosinophilia, neutropenia, and thrombocytopenia; reversible interstitial nephritis has been reported rarely.
- Cephalosporins have been implicated in triggering seizures, particularly in patients with renal impairment.
- *Abnormalities in laboratory test results* included slight elevations in aspartate aminotransferase (AST, SGOT) and alanine aminotransferase (ALT, SGPT). False-positive reactions for glucose in the urine may occur with Benedict's or Fehling's solution and Clinitest® tablets but not with Tes-Tape® (Glucose Enzymatic Test Strip, USP, Lilly).

Your confidence moves us. Again.

This year, more Mississippi doctors insured with us than with any other firm. Your confidence moves us . . . in more ways than one.

Growth through stability. Since we wrote our first policy in November of 1977, Medical Assurance Company has experienced steady growth and our membership is constantly increasing. The reason that more and more physicians are turning to us is simple: They know that they are receiving the most cost effective coverage backed by a financially sound company.

At Medical Assurance Company, savings and financial strength are provided by a program of sound investments and underwriting guidelines. Our staff is made up of experienced insurance professionals. And all claims are

reviewed by a panel of medical experts, so you can rest assured that your needs are understood.

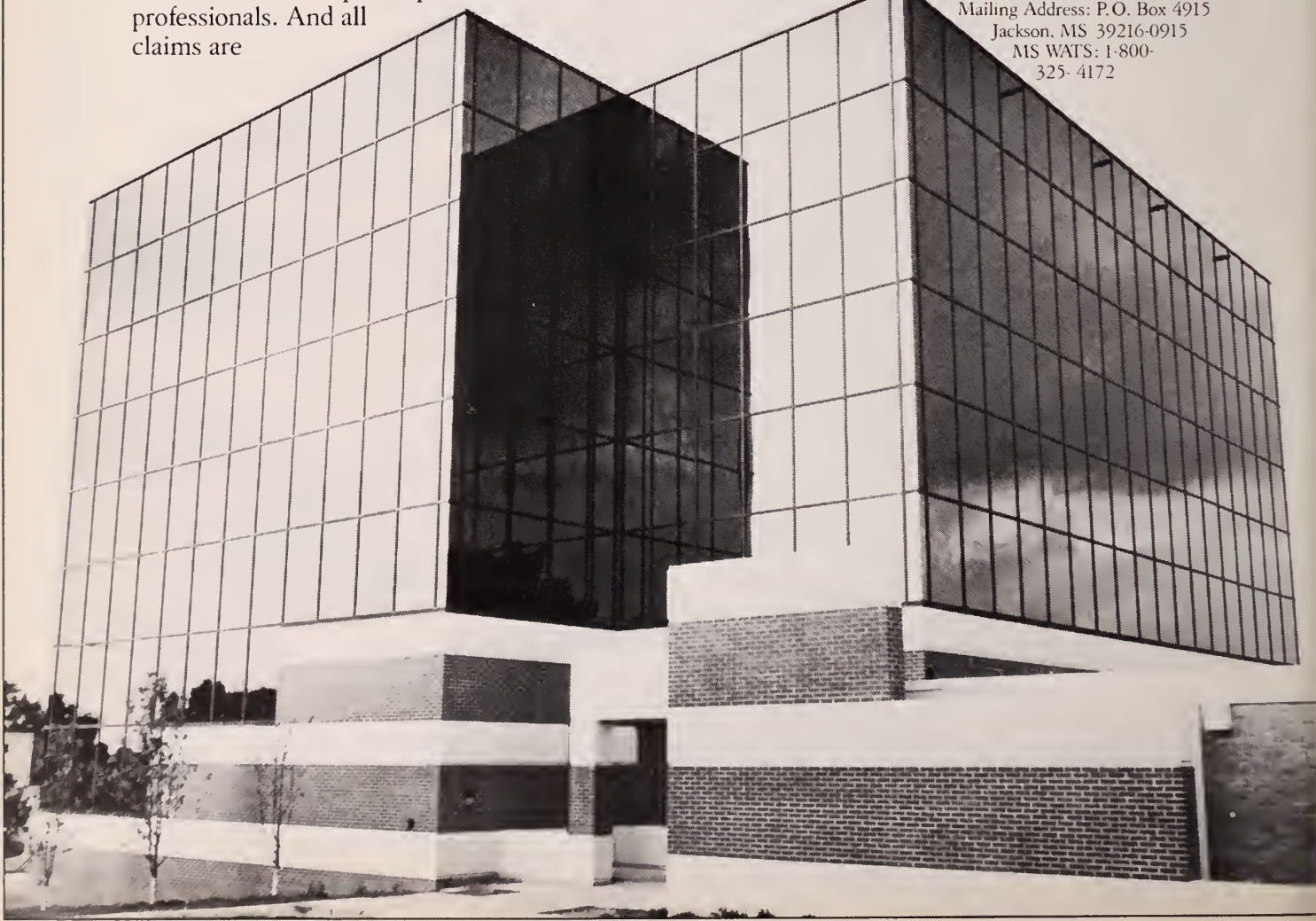
A new location. To house a larger staff and to provide even better service, we have moved back to the State Medical Association Building, this time occupying an entire floor.

For answers to any questions you might have regarding medical professional liability insurance, visit us in our new offices on Riverside Drive, or call us anytime.



Medical Assurance Company of Mississippi

Street Address: Suite 301
735 Riverside Dr., Jackson, MS
PHONE: (601) 353-2000
Mailing Address: P.O. Box 4915
Jackson, MS 39216-0915
MS WATS: 1-800-
325-4172



DATELINE

Make Application Now
For Scientific Exhibits

Jackson, MS - Applications are now
being accepted for scientific exhibits
for MSMA's 120th Annual Session,

June 15-19 at the Royal d'Iberville Hotel in Biloxi. Exhibit space is limited, and exhibitors are urged to make application early. To request space, write to MSMA giving the title of the proposed exhibit, names of all exhibitors, and estimated number of linear feet the exhibit will occupy.

Ethics Commission
Ruling Challenged

Jackson, MS - MSMA, the MS Hospital
Association and an MSMA member have
filed suit in Hinds County seeking a

declaratory judgment regarding a MS Ethics Commission ruling on physicians serving on hospital governing boards. The ruling finds medical staff membership a contract and states such contract prohibits service on the hospitals' governing boards. The suit seeks to have the ruling set aside.

Hollingsworth Memorial
Clinical Research Award

Jackson, MS - Physicians in private
practice or academic medicine may
apply for the Hollingsworth Memorial

Clinical Research Award. The grant will support a 12-month clinical research project in the field of cardiovascular medicine or surgery. For information about the award, which honors the late Dr. Jeff Hollingsworth, contact the American Heart Association, Mississippi Affiliate.

Socioeconomic Monitoring
System Survey Results

Chicago, IL - Some findings from the
AMA's 1987 Socioeconomic Monitoring
System survey: average professional

expenses were \$118,400 in 1986, up from \$102,700 in 1985; professional liability insurance premiums increased by an average annual rate of 24% in the last five years; physicians averaged 117.7 patient visits per week in 1986, the first year since 1979 in which visits did not decline.

Topical Tretinoin Improves
Sun-Caused Aging of Skin

Chicago, IL - The Jan. 22 issue of
JAMA reports that topical tretinoin
can reverse some skin wrinkling,

roughness and mottled pigmentation caused by chronic sun exposure. Researchers describe a 16-week, double-blind study involving 30 patients ranging in age from 35 to 70 years. All showed statistically significant improvement in sun-related skin damage.

Counsel to Authors

THE JOURNAL welcomes manuscripts which should be submitted to the Editors at 735 Riverside Drive, Jackson, MS 39216, in original and at least one duplicate copy. They must be typewritten double spaced on 8½ by 11-inch white paper. **Brief manuscripts (about 2,500 words or 8 pages) will be given preference over longer articles.**

The author is responsible for all statements made in his work, including changes made by the manuscript editor. Manuscripts are received with the understanding that they are not under simultaneous consideration by any other publication and have not been previously published. All manuscripts will be acknowledged, and while those rejected are generally returned to the author, the JOURNAL is not responsible in event of loss. Manuscripts accepted for publication become the property of the JOURNAL and are copyrighted by the association when published. They may not be published elsewhere without written release and permission from both the JOURNAL and the author.

All copy must be double spaced, including legends, footnotes, and references. Generous margins at the top, bottom, and on both sides of the page should be allowed. Each page after the title page should be consecutively numbered and carry a running head identifying the paper and author.

Titles should be short, specific, and clear. Ordinarily, a title should not exceed 80 characters, including punctuation.

References should be limited to a maximum of 10. If there are more than 10, the references will be omitted and a notation made to write the author for a complete list. Textbooks, personal communications, and unpublished data may not be cited as references. References must include names of authors, complete title cited, name of journal or book spelled out or abbreviated according to the *Index Medicus*, volume number, first and last page numbers, month, date (if published more frequently than monthly), and year. References should be arranged according to order listed in the text and must be numbered consecutively.

Manuscripts accepted for publication are subject to copy editing. Authors will receive galley proof prior to publication. Galley proof is only for correction of errors, and text changes

may not be made. The galley proof should be returned by the author within 48 hours from receipt, and no further changes may be made.

Illustrations consist of all material which cannot be set into type such as photographs, line drawings, graphs, charts, and tracings. Illustrations should be submitted separately from text copy. Figures and drawings should be professionally prepared with black ink on white paper. Photographs should be of high resolution, unmounted, untrimmed, glossy prints. Each must be clearly identified. No charges are made to authors for up to four illustration engravings. More are not permitted unless voted on by two editors and extra costs must be absorbed by the author.

Illustrations must be numbered and cited in the text. Legends, not exceeding 40 words and preferably shorter, must accompany each illustration, typed double spaced on separate sheets. The following information should appear on a gummed label affixed to the back of each illustration: Figure number, manuscript title, author's name, and arrow indicating top of the illustration.

In photographs in which there is any possibility of personal identification, an acceptable legal release must accompany the material.

A thesis summary of 75 to 100 words must accompany each manuscript.

Reprints may be obtained at cost plus shipping charges from the association and **should be ordered prior to publication.** The JOURNAL reserves the right to decline any manuscript. Authors should avoid placing subheads in the text, and the Editors reserve the prerogative of writing and inserting subheads according to JOURNAL style. — *The Editors.*

In addition, in view of *The Copyright Revision Act of 1976*, effective Jan. 1, 1978, transmittal letters to the editor should contain the following language: "In consideration of the Mississippi State Medical Association's taking action in reviewing and editing my submission, the author(s) undersigned hereby transfers, assigns, or otherwise conveys all copyright ownership to the MSMA in the event that such work is published by the MSMA." We regret that transmittal letters not containing the foregoing language signed by *all* authors of the submission will necessitate delay in review of the manuscript. — *The Editors.*

Before prescribing, see complete prescribing information in SK&F LAB CO. literature or PDR. The following is a brief summary.

Contraindications: There are no known contraindications to the use of Tagamet.

Precautions: While a weak antiandrogenic effect has been demonstrated in animals, Tagamet has been shown to have no effect on spermatogenesis, sperm count, motility, morphology or in vitro fertilizing capacity in humans.

In a 24-month toxicity study in rats at dose levels approximately 9 to 56 times the recommended human dose, benign Leydig cell tumors were seen. These were common in both the treated and control groups, and the incidence became significantly higher only in the aged rats receiving Tagamet.

Rare instances of cardiac arrhythmias and hypotension have been reported following the rapid administration of Tagamet HCl (brand of cimetidine hydrochloride) Injection by intravenous bolus.

Symptomatic response to Tagamet therapy does not preclude the presence of a gastric malignancy. There have been rare reports of transient healing of gastric ulcers despite subsequently documented malignancy.

Reversible confusional states have been reported on occasion, predominantly in severely ill patients.

Tagamet has been reported to reduce the hepatic metabolism of warfarin-type anticoagulants, phenytoin, propranolol, chlorthalidone, diazepam, lidocaine, theophylline and metronidazole. Clinically significant effects have been reported with the warfarin anticoagulants; therefore, close monitoring of prothrombin time is recommended, and adjustment of the anticoagulant dose may be necessary when Tagamet is administered concomitantly. Interaction with phenytoin, lidocaine and theophylline has also been reported to produce adverse clinical effects.

However, a crossover study in healthy subjects receiving either Tagamet 300 mg. q.i.d. or 800 mg. h.s. concomitantly with a 300 mg. b.i.d. dosage of theophylline (Theo-Dur®, Key Pharmaceuticals, Inc.),

demonstrated less alteration in steady-state theophylline peak serum levels with the 800 mg. h.s. regimen, particularly in subjects aged 54 years and older. Data beyond ten days are not available. [Note: All patients receiving theophylline should be monitored appropriately, regardless of concomitant drug therapy.]

Lack of experience to date precludes recommending Tagamet for use in pregnant patients, women of childbearing potential, nursing mothers or children under 16 unless anticipated benefits outweigh potential risks; generally, nursing should not be undertaken in patients taking the drug since cimetidine is secreted in human milk.

Adverse Reactions: Diarrhea, dizziness, somnolence, headache, rash. Reversible arthralgia, myalgia and exacerbation of joint symptoms in patients with preexisting arthritis have been reported. Reversible confusional states (e.g., mental confusion, agitation, psychosis, depression, anxiety, hallucinations, disorientation), predominantly in severely ill patients, have been reported. Gynecomastia and reversible impotence in patients with pathological hypersecretory disorders receiving Tagamet, particularly in high doses, for at least 12 months, have been reported. Reversible alopecia has been reported very rarely. Decreased white blood cell counts in Tagamet-treated patients (approximately 1 per 100,000 patients), including agranulocytosis (approximately 3 per million patients), have been reported, including a few reports of recurrence on rechallenge. Most of these reports were in patients who had serious concomitant illnesses and received drugs and/or treatment known to produce neutropenia. Thrombocytopenia (approximately 3 per million patients) and a few cases of aplastic anemia have also been reported. Increased serum transaminase and creatinine, as well as rare cases of fever, interstitial nephritis, urinary retention, pancreatitis and allergic reactions, including hypersensitivity vasculitis, have been reported. Reversible adverse hepatic effects, cholestatic or mixed cholestatic-hepatocellular in nature, have been reported rarely. Because of the predominance of cholestatic features, severe parenchymal injury is considered highly un-

likely. A single case of biopsy-proven periportal hepatic fibrosis in a patient receiving Tagamet has been reported.

How Supplied: Tablets: 200 mg. tablets in bottles of 100; 300 mg. tablets in bottles of 100 and Single Unit Packages of 100 (intended for institutional use only); 400 mg. tablets in bottles of 60 and Single Unit Packages of 100 (intended for institutional use only), and 800 mg. Tiltab® tablets in bottles of 30 and Single Unit Packages of 100 (intended for institutional use only).

Liquid: 300 mg./5 ml. in 8 fl. oz. (237 ml.) amber glass bottles and in single-dose units (300 mg./5 ml.), in packages of 10 (intended for institutional use only).

Injection: Vials: 300 mg./2 ml. in single-dose vials, in packages of 10 and 30, and in 8 ml. multiple-dose vials, in packages of 10 and 25.

Prefilled Syringes: 300 mg./2 ml. in single-dose prefilled disposable syringes.

Plastic Containers: 300 mg. in 50 ml. of 0.9% Sodium Chloride in single-dose plastic containers, in packages of 4 units. No preservative has been added.

ADD-Vantage® Vials: 300 mg./2 ml. in single-dose, ADD-Vantage® Vials, in packages of 25.

Exposure of the premixed product to excessive heat should be avoided. It is recommended the product be stored at controlled room temperature. Brief exposure up to 40°C does not adversely affect the premixed product.

Tagamet HCl (brand of cimetidine hydrochloride) Injection premixed in single-dose plastic containers is manufactured for SK&F Lab Co. by Travenol Laboratories, Inc., Deerfield, IL 60015.

* ADD-Vantage® is a trademark of Abbott Laboratories.

BRS-TG-L738

Date of issuance Apr. 1987

SK&F LAB CO.
Cidra, P.R. 00639

© SK&F Lab Co., 1988

In peptic ulcer:

RELIEF REASSURANCE REWARD



Tagamet®
brand of cimetidine
First to Heal

You'll both feel good about it.

RESULTS

Motrin[®] 800 TABLETS mg

ibuprofen



Extra strength
Convenience
Economy

Upjohn



A Century
of Caring
1886-1986

A better alternative for hypertensives who are going bananas...

Spare your patients the extra cost—
in calories, sodium and dollars.

Spare your patients the rigors of
dietary K⁺ supplementation.

DYAZIDE[®]

25 mg Hydrochlorothiazide/50 mg Triamterene/SKF

**Effective antihypertensive*
therapy...without
the bananas**

DAW

'DYAZIDE' AS WRITTEN.

* Not for initial therapy. See brief summary.

Before prescribing, see complete
prescribing information in
SK&F CO. literature or PDR.
The following is a brief summary.

*** WARNING**

This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

Contraindications: Concomitant use with other potassium-sparing agents such as spironolactone or amiloride. Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K⁺ levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K⁺ intake. Associated widened QRS complex or arrhythmia requires prompt additional therapy. Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia. Other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available. Sensitivity reactions may occur in patients with or

without a history of allergy or bronchial asthma. Possible exacerbation or activation of systemic lupus erythematosus has been reported with thiazide diuretics.

Precautions: The bioavailability of the hydrochlorothiazide component of 'Dyazide' is about 50% of the bioavailability of the single entity. Theoretically, a patient transferred from the single entities of triamterene and hydrochlorothiazide may show an increase in blood pressure or fluid retention. Similarly, it is also possible that the lesser hydrochlorothiazide bioavailability could lead to increased serum potassium levels. However, extensive clinical experience with 'Dyazide' suggests that these conditions have not been commonly observed in clinical practice. Angiotensin-converting enzyme (ACE) inhibitors can elevate serum potassium; use with caution with 'Dyazide'. Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids, and during concurrent use with amphotericin B or corticosteroids or corticotropin[ACTH]). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Cumulative effects of the drug may develop in patients with impaired renal function. Thiazides should be used with caution in patients with impaired hepatic function. They can precipitate coma in patients with severe liver disease. Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic and hemolytic anemia have been reported with thiazides. Thiazides may cause manifestation of latent diabetes mellitus. The effects of oral anticoagulants may be decreased when used concurrently with hydrochlorothiazide; dosage adjustments may be necessary. Clinically insignificant reductions in arterial responsiveness to norepinephrine have been reported. Thiazides have also been shown to increase the paralyzing effect of nondepolarizing muscle relaxants such as tubocurarine. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. Triamterene has been found in renal stones in association with the other usual calculus components. Therefore, 'Dyazide' should be used with caution in patients with histories of stone formation. A few occurrences of acute renal failure have been reported in patients on 'Dyazide' when treated with indomethacin. Therefore, caution is advised in administering nonsteroidal anti-inflammatory agents with 'Dyazide'. The

following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine. Hypokalemia is uncommon with 'Dyazide', but should it develop, corrective measures should be taken such as potassium supplementation or increased dietary intake of potassium-rich foods. Corrective measures should be instituted cautiously and serum potassium levels determined. Discontinue corrective measures and 'Dyazide' should laboratory values reveal elevated serum potassium. Chloride deficit may occur as well as dilutional hyponatremia. Concurrent use with chlorpropamide may increase the risk of severe hyponatremia. Serum PBI levels may decrease without signs of thyroid disturbance. Calcium excretion is decreased by thiazides. 'Dyazide' should be withdrawn before conducting tests for parathyroid function. Thiazides may add to or potentiate the action of other antihypertensive drugs. Diuretics reduce renal clearance of lithium and increase the risk of lithium toxicity.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth, anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermalogical conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances; postural hypotension (may be aggravated by alcohol, barbiturates, or narcotics). Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and respiratory distress including pneumonitis and pulmonary edema, transient blurred vision, sialadenitis, and vertigo have occurred with thiazides alone. Triamterene has been found in renal stones in association with other usual calculus components. Rare incidents of acute interstitial nephritis have been reported. Impotence has been reported in a few patients on 'Dyazide', although a causal relationship has not been established.

Supplied: 'Dyazide' is supplied as a red and white capsule, in bottles of 1000 capsules; Single Unit Packages (unit-dose) of 100 (intended for institutional use only); in Patient-Pak™ unit-of-use bottles of 100.

BRS-DZ-L45

a product of
SK&F CO.
Cidra, P.R. 00639

© SK&F Co., 1987

TODAY.

Tax laws have changed this year. And tax forms are different.
So it's smarter than ever to file now and file accurately. If you need help,
call or visit your local IRS office. And make your taxes less taxing.

Make your taxes less taxing. Do them today.

A Public Service of This Publication &



Internal
Revenue
Service



TELL YOUR PATIENTS THEIR CHOLESTEROL NUMBER... BEFORE THEY ASK.

Reducing high blood cholesterol reduces the risk of heart disease. That's why we're telling Americans—through a national public service advertising campaign—to know their cholesterol number. Your patients may soon be asking you for their number and what it means.

And when they do, we can help. The National Cholesterol Education Program, administered by the National Heart, Lung, and Blood Institute, has developed adult treatment guidelines to help you identify high-risk patients and use the appropriate diet and/or drug therapy for those with elevated cholesterol levels.

Help your patients reduce their risk of heart disease. For a free copy of the *Report of the Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults*, complete the form below.

Name _____
Specialty _____
Address _____
City _____ State _____ Zip _____

Mail to: Cholesterol Adult Treatment Guidelines
National Cholesterol Education Program
National Heart, Lung, and Blood Institute
C-200-GA
Bethesda, MD 20892



NATIONAL CHOLESTEROL EDUCATION PROGRAM
NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

National Institutes of Health • Public Health Service • U.S. Department of Health and Human Services

**You're
a Professional.**

**You need Professional
Health Insurance
Coverage.**

MSMA

Benefit Plan and Trust

MSMA Benefit Plan and Trust is a superior insurance program which fulfills the quality of coverage and affordability that everyone wants.

Sponsored by the Mississippi State Medical Association, the MSMA Benefit Plan and Trust offers life and health benefits to physician members of MSMA, their employees and families.

- \$1,000,000 lifetime benefits.
- Life Coverage up to \$50,000.
- Broad benefits with fair and equitable rates.
- Management by and for physicians.
- Non-profit and administered at lowest possible cost.

For Complete Description of Benefits Write:

MSMA Benefit Plan and Trust

P.O. Box 55509
Jackson, MS 39216

ORIGINAL PAPERS

The 1987 James Grant Thompson Lecture: What Everybody Should Know About Vascular Trauma

KAJ JOHANSEN, M.D., Ph.D.

Seattle, Washington

INJURIES TO ARTERIES and veins are a major complication of various types of trauma. Despite real advances in our abilities to recognize and deal with these problems, a significant incidence of limb and organ loss, and occasional mortality, persists. Rapid and well-designed operative interventions may be crucial. However, of even greater importance are the early recognition, localization, and "triage" of vascular injuries, many of which may have subtle presentations. This essay discusses vascular injury from the perspective of *any* health care professional involved in the care of trauma victims.

Epidemiology

Except for devastating central nervous system damage, vascular injury represents the leading cause of death in trauma. In deceleration motor vehicle accidents, disruptions of the heart and the proximal aorta are a common cause of death at the accidental scene.¹ Those patients who survive until hospitalization are occasionally found to have proximal descending thoracic aortic tears of varying degrees, and the necessity for emergency arch aortography to rule out such injuries is paramount: patients har-

Vascular trauma continues to exact a substantial toll in limb loss, mortality, hospitalization, suffering, and incapacitation. A heightened level of concern in circumstances where arterial or venous trauma might have occurred may be the most important protection against subsequent vascular disaster, according to the author. He maintains that the pathophysiology of limb and tissue ischemia is well established, and mandates restoration of perfusion within six to eight hours after onset of "warm ischemia." Even when perfusion has been restored, the potential exists for catastrophe if the physician is not mindful of the possibility of subsequent compartmental hypertension. The medical profession's increasing dependence on invasive technology has been paralleled by a worrisome increase in the incidence of iatrogenic vascular trauma.

boring such injuries have a 50% mortality per hospital day!

Massive hemorrhage is an obvious sign of major vascular injury, and few preoperative diagnostic measures are necessary or appropriate in the patient with a rapidly expanding or pulsatile hematoma, or arterial bleeding issuing from a cutaneous wound. On the other hand, arterial disruption leading to

From the Department of Surgery, Harborview Medical Center, University of Washington School of Medicine, Seattle, WA. Adapted from a presentation during the annual meetings of the Mississippi State Medical Association and the Mississippi State Chapter of the American College of Surgeons, Biloxi, MI June 4-5, 1987.

impending or actual distal tissue ischemia may be subtle and difficult to diagnose, especially in the patient with multiple other injuries. Indeed, even if identified, management of an ischemic limb may occasionally be relegated to a position behind an immediately life-threatening cerebral, thoracic, or abdominal injury. This sort of management dilemma in the polytrauma victim is seen frequently at major referral trauma centers and is discussed further subsequently.

The era of technology is upon us, and with its undenied diagnostic and therapeutic benefits has occurred an increasing number of vascular complications secondary to vascular catheterizations or punctures for diagnosis or monitoring. For example, while the risk of arterial thrombosis or hemorrhage resulting from standard angiographic catheterization is low — less than 0.3%² — nevertheless the increasing utilization of such techniques places a substantial number of patients at risk.

Pathophysiology

Exsanguinating hemorrhage occurs through in-



Figure 1. A "floating knee" injury, so-called because of coexisting femur and tibia-fibula fractures. Note interruption of both the superficial femoral artery (upper arrow) and the tibial vessels (lower arrows).

complete rents in vessels. Especially in arterial injury, complete arterial disruption frequently leads to vessel constriction, resulting in minimal bleeding, at least in the early period following injury. Large venous injuries can bleed profusely, especially into the mediastinum or the chest; in the limbs and pelvis, such venous injuries rather more commonly are tamponaded by surrounding tissues.

When arterial inflow is interrupted, the extent to which distal tissues are rendered ischemic is a direct consequence of their mass, the time since the onset of ischemia, and the adequacy of collateral flow. The well-established "golden period" of six to eight hours for warm ischemia has been documented both experimentally³ and in innumerable clinical experiences. It is of interest that the ability of ischemic tissues to survive is prolonged by cooling (as for severed digits), and it may be that external cooling of acutely ischemic extremities may have some use in prolonging the period of time before irreversible ischemic changes occur.

Even when ischemic tissue is reperfused, in certain parts of the body — notably the forearm and the leg — transudation of fluid into a compartment surrounded by an inelastic fascial envelope can cause substantial rises in tissue pressure, leading to venular occlusion, arterial shutdown, and tissue loss.⁴ This so-called "compartmental hypertension" is a subtle and underemphasized cause of late limb loss following apparently successful limb revascularization. Its recognition and management are discussed more fully subsequently.

Clinical Presentation

Perhaps most crucial in the diagnosis of vascular trauma is recognizing that certain types of trauma have a high likelihood of an associated vascular injury. Major deceleration trauma has previously been mentioned, and all such patients should be evaluated at least on upright chest roentgenogram for evidence for mediastinal widening or obscuration of the aortic knob.

Other injuries are worrisome as well. For example, injuries which lead to disruption of the knee, such as dislocation, have a substantial incidence of associated popliteal artery and/or vein injury,⁵ and I believe strongly in performing arteriography in such patients even in the presence of normal distal perfusion. Because of the extraordinary amount of kinetic energy applied in such injuries, I have similar concerns about so-called "floating knee" injuries — supracondylar femur fractures combined with both-bone fractures of the leg (see Figure 1).

TABLE

The six Ps of acute arterial insufficiency

Paresthesias
Pallor
Pulseless
Paralysis
Pain
Polar or Poikilothermic!

Similarly, especially in children, dislocations of the elbow, or fractures of the supracondylar humerus, have a substantial risk of forearm ischemia if the brachial artery is concurrently injured.

Penetrating injuries to the brachiocephalic region mandate an aggressive teamwork approach, for the possibility of occult carotid, innominate, or subclavian artery injury is exacerbated by the possibility for injury to the aerodigestive tract, the brain and/or spinal cord, and the chest. Undiscovered, such injuries may lead either to exsanguination or stroke, or to rapidly ascending/descending infections, mediastinitis, and death. Similarly, intra-abdominal injuries to the retrohepatic vena cava have an equivalent likelihood of bad outcome, and should be prepared for in advance if they are considered likely or even possible.

As previously noted, with massive hemorrhage there is usually little doubt about the presence of arterial or venous disruption. These patients frequently present with evidence for hemodynamic instability, and may be found to have a rapidly falling hematocrit in the presence of adequate fluid administration. Chest x-rays or peritoneal lavage may reveal gross blood upon chest tube insertion or peritoneal lavage, and injured extremities may show pulsatile hematomas or bright red bleeding from wounds.

When patients have acute arterial occlusion, their presentation is commonly much more subtle. A constellation of symptoms and signs is characteristically present if sought (see Table). The most subtle of these signs is neurologic dysfunction, characterized by paresthesias or numbness in the extremity. Such limbs are also pale, cool, devoid of pulses and, in their late phases, painful and immobile. Such signs are indication of a rapidly progressive pathophysiologic process which will result in irreversible tissue ischemia if perfusion is not restored rapidly.

Classic discussions of vascular trauma have developed the taxonomy of "blunt" and "penetrating" trauma to blood vessels. In our observation this distinction is less helpful than others have found it. Penetrating injuries may cause massive soft tis-

sue, skeletal, and vascular destruction (see Figure 2), and blunt injuries may result in vascular injuries which are very localized (see Figure 3). I believe that injury kinetics and anatomic variables, such as the inadequate collateralization around the knee joint (as compared, for example, with the superlative collateral reserve around the shoulder joint) are much more crucial than whether the wound is penetrating or blunt.

Diagnostic Procedures

Careful history-taking and serial physical examination remains the most important method for recognizing an occult vascular injury. Information obtained from paramedics or observers at the scene of an injury may also be valuable — for example, whether pulses were present prior to fracture splinting, or whether there was distal sensation in a traumatized extremity.

Arteriography is also frequently emphasized for vascular trauma,⁶ and indeed a skilled radiologist



Figure 2. Trauma due to a high-muzzle-velocity gunshot wound, ultimately resulting in below-knee amputation. Although "penetrating" in nature, this wound was caused by massive energy transfer to the skeletal and soft tissues of the leg.

may provide exceptional insight into the magnitude and anatomic location of a vascular injury. Individuals with blunt or penetrating injuries in which proximity or anatomic location raise concern about the possibility of an occult vascular injury are excellent candidates for angiography, since adequate visualization of normal vessels can eliminate the necessity for operative exploration.

However, some vascular injuries require little or no localization at all, and such patients should go directly to the operating room. For example, a patient with a femur fracture and an ischemic limb distal to that point (see Figure 3) probably does not need an arteriogram. In this case it is abundantly clear where the vascular problem is; if needed, further information may be obtained in the operating room with on-table contrast studies. In fact, patients with bright red bleeding from wounds, rapidly expanding hematomas, or acute arteriovenous fistulas rarely need arteriography, but rather should go directly to the operating room. An underemphasized but very valuable diagnostic technique in circum-



Figure 3. Division of the superficial femoral artery due to a nearby closed femur fracture. Although "blunt," this vascular trauma was localized and minimal.

stances where vascular injury is suspected is the use of the hand-held ultrasonic Doppler (see Figure 4). Widely used for the evaluation of *chronic* arterial and venous disease, this device can be extremely valuable when used in the patient with actual or potential acute arterial injury. It is not only important for discerning whether there is actual arterial flow present, but also can be used to provide objective data about arterial perfusion. For example, presence of a normal ankle/arm blood pressure ratio (around 1.0) in a limb with multiple fractures rules out the possibility of major axial arterial disruption even if pulses are obscured by hematomas or swelling.



Figure 4. The handheld Doppler is under-utilized in the evaluation of vascular trauma. Frequently, this device may obviate the necessity for arteriography.



Figure 5. Temporary plastic shunts inserted at or near the sites of vascular trauma can provide immediate and reliable revascularization of the distal tissues.

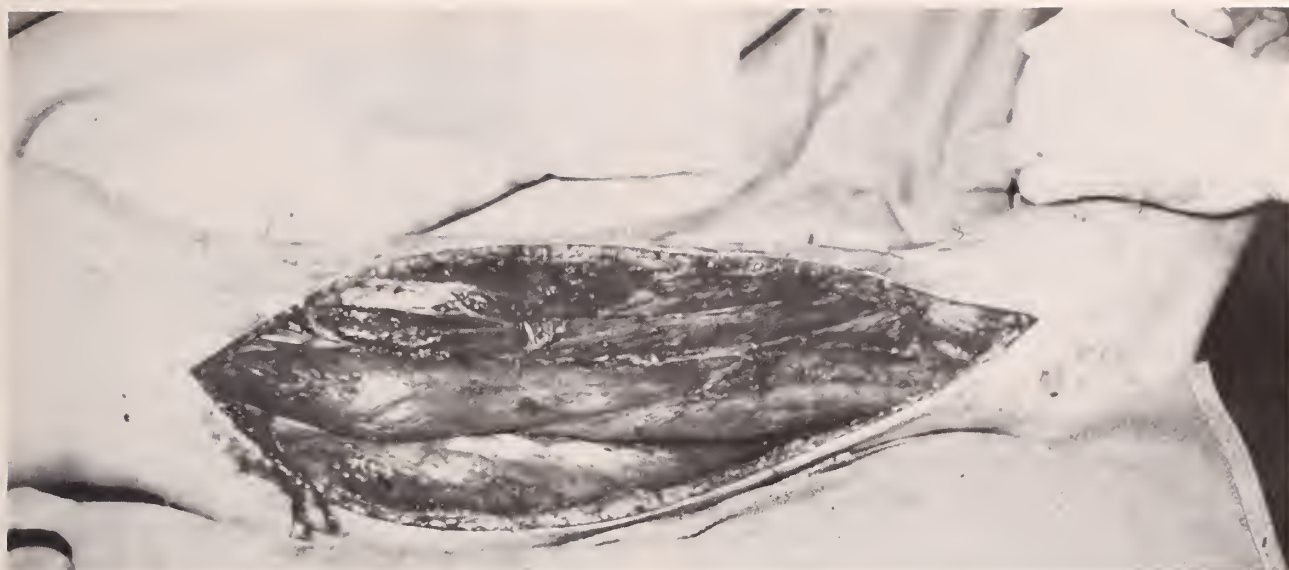


Figure 6. Wide four-compartment fasciotomy can save limbs threatened by compartmental hypertension.

Management of Vascular Injuries

This essay emphasizes recognition and diagnosis of vascular injuries, rather than their specific surgical management. However, it may be useful and interesting for the practitioner to recognize what techniques are available to expedite and facilitate the correction of vascular injuries. A number of these techniques, while developed in university trauma centers, are readily accessible to the clinician in smaller regional or local trauma centers where the vast majority of vascular trauma is still seen.

A standard dilemma for patients with polytrauma is that vascular injury rarely exists "in a vacuum." The patient may have coexisting intracranial, thoracic, or abdominal injuries, the management of which takes priority over the threat of limb loss due to vascular insufficiency. Even for isolated extremity injuries, a fracture combined with severe soft tissue and vascular disruption is a problem with multidisciplinary implications, and priorities must be set in their management. I have previously termed such circumstances "complex vascular injuries."⁷

A cardinal example is the setting of coexistent fracture and limb ischemia, where an ongoing debate persists about whether first to manage the fracture or the arterial disruption. We have developed for civilian vascular injuries the technique, first reported by Eger et al,⁸ of temporary plastic shunting for immediate reperfusion of ischemic limbs, and have found this to be highly satisfactory (see Figure 5). Since the institution of routine arterial (and ve-

nous) shunting of complex vascular injuries at our trauma center, we have lost *no* limbs due to inability to restore limb perfusion in time. Further, it is our impression that the skeletal and soft tissue management of these injuries has proceeded in much more satisfactory and complete fashion as well. Details of this technique have been described more fully elsewhere.⁷

Other important recent advances for the management of complex vascular injuries include the use of external fixators for fractures, synthetic plastic grafts, autotransfuser devices for major vascular trauma, the value of balloon thrombectomy and completion angiography following vascular repair, optical magnification and fine vascular instruments and sutures, and the recognition of the potential gravity of compartmental hypertension.

As previously noted, reperfusion of ischemic tissue may lead to rapid fluid transudation and elevation of compartmental tissue pressure. When this phenomenon occurs in the forearm or especially in the four compartments of the calf, silent tissue destruction may occur within the space of hours. It is widely and mistakenly believed that pulse deficits are present when compartmental hypertension occurs; in point of fact, lymphatic and venous obstruction can occur if compartmental pressures exceed 30-40 mmHg — far below the tissue pressures required to obstruct major arteries. Indeed, the signs of compartmental hypertension are primarily neuromuscular, with paresthesias, numb-

ness, inability to flex or extend the ankle or wrist, and muscle tension or tenderness on palpation.

A low threshold for the performance of complete fasciotomy (see Figure 6), or, at the least, compartment pressure monitoring,⁹ must be maintained by all those managing patients with recent or current vascular trauma. Similarly, the presence of acute renal failure, myoglobinuria, or hemodynamic instability in a patient who has had vascular trauma suggest myonecrosis due to unrecognized compartmental syndrome as a cause.

Iatrogenic Vascular Injury

As previously noted, an astonishing range of vascular injuries has resulted from various diagnostic, monitoring, and therapeutic maneuvers performed by health care professionals. These have included arterial and venous thromboses due to intravascular cannulas, vascular sepsis due to infection of these same devices, distal embolization or pseudoaneurysm formation following angiographic catheterization, temporary or permanent neurologic deficits associated with extravasation from arterial puncture sites, arteriovenous fistula formation, inadvertent ligation of or damage to nearby vascular structures during nonvascular operations, and a whole variety of acute vascular problems accompanying the new therapeutic angiographic modalities of balloon dilatation and trans-catheter thrombolysis. Space restrictions prevent detailed discussions of such problems here, other than to emphasize that those who perform any intervention in or near major arteries and veins must remain vigilant to the possibility of occult vascular injury as a consequence.

Summary

The proper management of vascular trauma depends far more on early recognition of occult lesions than it does upon technologic advances or operative expertise. The clinician faced with a patient who may have suffered a vascular injury should consider the kinetics of the injuring mechanism, the anatomic location of the actual or potential injury, and the classic symptoms and signs associated with trauma to blood vessels. Few aspects of the evaluation of the traumatized patient have greater immediate relevance to life and limb than the timely recognition and expert management of vascular injury. ★★

325 9th Avenue (98104)

References

1. Symbas PN. *Trauma to the Heart and Great Vessels*. New York, Grune & Stratton, 1978.
2. Youkey JR, Clagett GP, Rich NM, et al. Vascular trauma secondary to diagnostic and therapeutic procedures (1974 through 1982): a comparative review. *Am J Surg* 1983;146:788-791.
3. Malan E, Tattoni G. Physio- and anatopathology of acute ischemia of the extremities. *J Cardiovasc Surg* 1963;4:2-9.
4. Matsen FA. *Compartmental Syndromes*. New York, Grune & Stratton, 1980.
5. Snyder WH, Watkins WL, Whiddon LL, et al. Civilian popliteal artery trauma: an eleven-year experience with 83 injuries. *Surgery* 1979;85:101-108.
6. Ben-Menachem Y. *Angiography in Trauma: A Work Atlas*. Philadelphia, WB Saunders, 1981.
7. Johansen K, Bandyk D, Thiele B, Hansen ST: Temporary plastic shunts: resolution of a management dilemma in complex vascular injuries. *J Trauma* 1982;22:395-402.
8. Eger M, Golcman L, Goldstein A, et al. The use of a temporary shunt in the management of arterial vascular injuries. *Surg Gynecol Obstet* 1971;123:67-70.
9. Whitesides TE, et al. A simple method for tissue pressure determination. *Arch Surg* 1975;110:1311-1314.

The Miniature Battery: A New Foreign Body Hazard

C. RON CANNON, M.D.

Jackson, Mississippi

IN THE PAST SEVERAL YEARS the electronics industry has greatly miniaturized the size of its components and products. This has resulted in a fascinating array of consumer products such as watches, calculators, computers, toys and camera equipment. These electronic devices are powered by small disc batteries. It seems that, as a by-product of this new technology, a new foreign body hazard has arisen, particularly in the region of the ear canal and nasal cavity.

Case Report

A nine-year-old male disassembled his digital LED watch and began playing with the disc battery. He playfully placed it in his right ear where it subsequently lodged. Attempts to remove it only served to impact the battery further into the ear canal. He then saw his local physician who tried to irrigate the battery out of the ear canal without success. On prompt referral, the right ear canal was noted to be swollen, tender, and erythematous, with a disc battery lodged in the bony portion of the canal. The tympanic membrane appeared intact. The battery was too tightly lodged to permit retrieval using an office microscope and alligator forceps. The patient required a general anesthetic to remove the battery. At surgery, the battery was removed intact with no damage to the battery casing. There was edema but no erosion of the ear canal, and the tympanic membrane was intact.

On followup visits, an impressive black exudate was cleaned on several occasions. The patient was treated with topical antibiotic drops and at four months post-accident continued to have an area of exposed bone in the floor of the bony portion of the ear canal. Atrophic epithelium subsequently covered the area of bare bone at six months post-injury. The remainder of the ear canal and ear drum remain normal.

Dr. Cannon is engaged in the private practice of otolaryngology and head and neck surgery in Jackson, MS.

An explosion of technology in the past several years has resulted in smaller sized and more affordable items such as watches, calculators, computers, toys, and camera equipment. These items are powered by miniature batteries which pose a new foreign body hazard in the region of the nose and ear, according to the author. He reports a case and describes mechanisms of injury and principles of treatment.

Discussion

Most of the early reports of miniature battery ingestion dealt with battery ingestions involving the esophagus and remainder of the gastrointestinal tract.^{1, 2, 3} More recently, attention has become focused on sites in the head and neck, primarily in the ear and nose.^{4, 5}

Tissue injury is thought to occur by one of two possible mechanisms. The first involves spontaneous or, more likely, instrumentation-induced mechanical damage to the battery case itself. The other mechanism involves electrolysis of saline or electrolyte-containing solutions such as ear drops, with resultant damage to surrounding tissues or the battery container itself. This, of course, leads to leakage of the battery contents and further damage to local tissues.

There seem to be certain groups at risk for this type injury. These include primarily young patients who make up a large proportion of those with foreign bodies. Also at risk are elderly patients with hearing aids. In a recent report of ten patients with miniature battery foreign bodies in the ear and nose, six involved the use of batteries intended for hearing aids.⁴ The elderly patient may place the battery in his ear canal thinking that it is his hearing aid.⁴

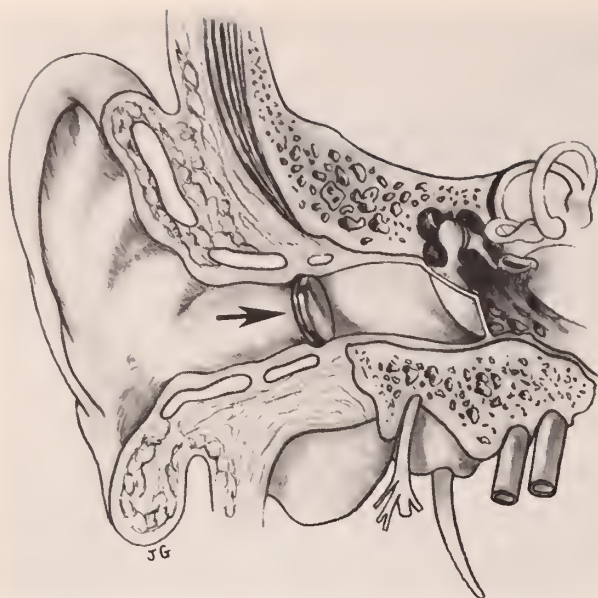


Figure 1. Disc battery (arrow) lodged in ear canal.

Severe damage to the ear including large tympanic membrane perforation, facial nerve paralysis, and ossicular chain damage have been reported.

Treatment should begin with prevention of this potential problem. Physicians and the general public should be made aware of the potential hazards of a miniature battery foreign body. The manufacturers of these small batteries should label and identify this risk and distribute the batteries in tamper-proof enclosures. Those who dispense hearing aids should carefully educate the patients about proper use of the aid and how to change the batteries.

A battery in the nose or ear should be removed promptly. Ear drops or other electrolyte-containing solutions should be avoided to prevent electrolysis. When removing the battery instrumentation of the battery should be careful and meticulous. Cup forceps should be avoided as they may crush the metal container of the battery. In the ear a small right-angle pick may be passed by the battery, rotated, and then used to extract the battery.⁴ After the battery has been removed the ear canal should be irrigated and the patient followed for an extended period of time to monitor healing of the affected area.

Small disc batteries pose a unique foreign body hazard in the region of the nose and ear. The foreign body should be removed as quickly as is practical without the use of electrolyte containing irrigants. Follow-up over an extended period of time is advised to monitor late sequelae of these small batteries. ★★★

P.O. Box 5345 (39216)

References

1. Litovitz, TL: Button Battery Ingestions: A review of 56 cases. JAMA 1983; 249:2495-2500.
2. Mogelson WC, Greensher J, Curaccio TR, et al: Ingestion of small flat disc batteries. Ann Emerg Med 1983; 12:88-90.
3. Litovitz T, Butterfield AB, Holloway RR, et al: Button Battery Ingestion: Assessment of therapeutic modalities and battery discharge state. J Pediatr 1984; 105:868-873.
4. Kavanagh, KT; Litovitz, T: Miniature Foreign Bodies in Auditory and Nasal Cavities. JAMA 1986; 255:1470-1472.
5. Capo JM; Lucente FE: Alkaline Battery Foreign Bodies of the Ear and Nose. Arch Otolaryngol Head and Neck Surg 112:562-563, 1986.

Radiological Seminar CCXLIX: The Role of Radiographic Evaluation in the Diagnosis of Epiglottitis

JENNIFER H. TURNER, M.D.

BERNARD I. BLUMENTHAL, M.D.

Jackson, Mississippi

EPIGLOTTITIS IS RECOGNIZED as a medical emergency. Its onset can be rapid, and if not treated properly, the syndrome can result in death. In the pre-antibiotic era, epiglottitis was almost uniformly fatal. However, today, with early and appropriate treatment, mortality has been reduced to approximately 2%.¹

Epiglottitis can be pathologically described as a localized cellulitis which involves the supraglottic structures, including the aryepiglottic folds, arytenoid cartilages, and epiglottis.² In acute epiglottitis, this inflammation is caused by a bacterial pathogen, which is almost always *Hemophilus influenza* type B. It should be noted, however, that other pathogens such as *Streptococcus pneumoniae*, *Staphylococcus aureus*, *Homophilus parainfluenza* have rarely been shown to be the causative agent.¹

This infection, of course, is almost always seen in the pediatric population, and is most commonly seen between the ages of 3 to 6 years.³ However, the syndrome can strike any age group, and in adults, this is seen most frequently in males after the third decade of life.⁴ In both age groups, the highest incidence of this infection is in the winter months.^{1, 4}

In epiglottitis, the patient usually appears quite ill. Fever, inspiratory stridor, a muffled voice, and drooling may all be present. Hoarseness is not characteristically seen in these patients.⁵ Once there is a suspicion of epiglottitis, the severity of the illness will dictate the next steps in treatment. If the patient is in severe distress, and signs such as cyanosis, altered sensorium, or severe suprasternal and infrasternal retractions are present, immediate trans-

port to the operating room for laryngoscopy and intubation or tracheostomy is indicated. In less severe infections, the first diagnostic procedure should be a radiograph. In these cases, radiographic examination is indicated, rather than attempts at direct visualization of the posterior pharynx, because of the potential risks of precipitating complete obstruction of the patient's airway.⁶

Generally, AP and lateral views of the neck are obtained in the evaluation of epiglottitis. On the lateral view, one should see thickening of the aryepiglottic fold and epiglottis, indicating edema and inflammation of these structures. If the inflammatory changes are severe enough, the epiglottis takes on the appearance of an extended thumb.² Although classically, epiglottitis is thought of as involving the supraglottic structures and therefore the subglottic portion of the trachea should appear to be of normal caliber, this is not always the case. At least 25% of patients with proven bacterial epiglottitis will demonstrate a localized subglottic edema as well, and this may produce a funnel shape of the subglottic region on the AP radiograph.³

It should be noted that several other causes of epiglottic enlargement exist, and one should always be aware of these possibilities when analyzing the radiograph. Among these possibilities is the omega epiglottis which is an epiglottis that, nonpathologically, has thickened lateral flaps, or extensions, of tissue. These thickened extensions curve in a downward direction, giving the epiglottis a prominent appearance. However, in this case, the patient's aryepiglottic folds will be of normal appearance, and this helps to distinguish them from changes representing inflammation.² Other causes of an enlarged epiglottis, to list a few, include angioneurotic

Sponsored by the Mississippi Radiological Society.
From the Department of Radiology, University Medical Center,
Jackson, MS.



Figure 1. Radiograph demonstrating the normal anatomical structures on the lateral neck radiograph. (A) epiglottis; (B) vallecula; (C) hyoid; (D) aryepiglottic folds; (E) false cords; (F) laryngeal ventricle; (G) true cords.

edema, Stevens-Johnson syndrome, epiglottic or aryepiglottic cyst, radiation, caustic ingestion, or foreign body.³ With this in mind, it is important that one correlate the radiographic findings with the patient's medical history in determining the etiology of the epiglottic enlargement. ★★★

Dr. Turner: 2500 North State Street (39216)



Figure 2. Radiograph demonstrating acute epiglottitis. (A) thickened epiglottis producing the "thumb" sign; (B) thickened aryepiglottic folds; (C) subglottic trachea, which is of normal caliber.

References

1. Grodin MA; Epiglottitis. *J Emerg Med*; 2(1):13-6, 1984.
2. Swischuk LE: *Emergency Radiology of the Acutely Ill or Injured Child*. Williams and Wilkins, 2nd ed., pp. 130-133, 1986.
3. Kirks DR: *Practical Pediatric Imaging Diagnostic Radiology of Infants and Children*. pp. 425, 428, 429, 1984.
4. Miller GW: Acute epiglottitis in adults. *Am Fam Physician*; 26(2):183-185, August 1982.
5. Broniatowski M: Epiglottitis. *Ear, Nose, Throat Journal*; 64(1):22, 24, 26-27, January 1985.
6. Vernon DD, Sarnaik AP: Acute epiglottitis in children: a conservative approach to diagnosis and management. *Crit Care Med*; 14(1):23-25, January 1986.

Myelomeningocele: Adolescence/ Sexuality/Vocational Skills

WILLIAM A. LONG, JR., M.D.
Jackson, Mississippi

THE ADOLESCENT patient has special difficulty with chronic illness in any form, and the implications of severe disability in locomotion and bodily function control are particularly disturbing to the status-conscious and peer-dependent teenager.

Among the most important considerations for the adolescent with myelomeningocele is that of independence, both emotional separation from the family unit and economic independence as evidence of the two major indicators of true maturity in our societal system. Obviously the physical limitations involved in this condition create great concern that either will be mastered, and are the source of continuing anxiety as a teenager progresses through adolescence.

Social adaptation is another task of adolescence which may be significantly hindered by this condition, and the acquisition of peer acceptance must always be a goal of therapy, understanding that this period of life development involves a natural separation from the authority and closeness of family ties and the concurrent attachment to other teenagers or adults. Everything possible must be done to enable the patient to speak the language and adopt the dress of that age group as a means of exhibiting his adolescence in ways that everyone will recognize.

Perhaps the chief long range concern of the teenager with myelomeningocele is that of sexuality and the normal expression of this rapidly maturing aspect of life during the teenage years. Open discussion with teenagers who have this disability will usually elicit some frank expressions of doubt and

This is the seventh in a series of articles on current concepts in the care and habilitation of the child with myelomeningocele.

fear surrounding courtship, marriage, and acceptance by the opposite sex.

Finally, the normal teenager will be concerned with the formation of personal identity, or the identification and realization of his personhood, an essential ingredient in the clear definition of himself as an adult worthy of membership in our complicated and sophisticated society. Failure to form a firm identity simply means that adolescence is perpetuated indefinitely, with its accompanying immature reactions to stress, unwise judgments, and persistent ambivalence. This may result in more difficulty with the gaining of independence, adequate social adaptation as an adult, and sexual maladjustment than might have occurred as a result of the physical disability alone.

Educationally, many problems may arise out of chronic disability. School absenteeism, problems of concentration and achievement secondary to anxiety and depression, loss of school-based peer status, and the inability to function competitively in sports certainly rank high on such a list of difficulties.

With impairment of educational advancement and accomplishment, inevitable problems in career planning and job security develop, so the youngster may find himself in a downward spiral of progressive failures and advancing discouragements which compound the anxieties surrounding his physical

Dr. Long is engaged in the private practice of pediatrics and adolescent medicine in Jackson, MS.

disabilities. Facts that must be faced with alacrity and courage include limitations of career choice, the inability to compete in many jobs requiring physical performance, and the inability to make long range career plans if prognosis is poor for basic or continued physical functioning.

Amidst this disturbing web of developmental, emotional, educational, and vocational problems, there is still reason for great hope as the physician works with the evaluation, education, and treatment of these youngsters, and with the coordination of the various rehabilitation and health supervision programs involved in their management. Individual personal followup and support throughout the long process is essential, as the physician strives to aid the patient and his family to accept the physical, social, and emotional limitations associated with this condition. Maximum development and accomplishment must be stressed within the limits imposed by the physical disability at hand while maintaining where possible a healthy emotional outlook by the patient and the family. There must be emphasized a continual faith in the future and a positive attitude toward the present in every patient. This requires maximum effort, strength and courage on the part of the physician as example to the patient that all efforts toward habilitation are worthwhile. The rewards of such support and leadership are often

undefinable in the scientific sense, but invaluable toward individual patient success. ★★★

838 Lakeland Drive (39216)

Bibliography

- Carroll, G.; Massarelli, E.; Opzoomer, A.; Pেকেles, G.; Pedneault, M.; Frappier, J-Y; Onetto, N. Adolescents with Chronic Disease. Are They Receiving Comprehensive Health Care? *J. Adol. Health Care* 1983 Dec; 4(4):261-5.
- Kovar, N. F. Some indicators of health-related behaviour among adolescents in the United States. *Public Health Rep.* 1979;94:109-18.
- Leichtman, S. R.; Friedman, S. B. Social and psychological development of adolescents and the relationship to chronic illness. *Med. Clin. N. Am.* 1975;59:1319-28.
- Wolfish, M. G.; McLean, J. A. Chronic illness in adolescents. *Pediatr. Clin. N. Am.* 1974;21:1043-49.
- Kellerman, J.; Zeltzer, L.; Ellenberg, L., et al. Psychological effects of illness in adolescence. I. Anxiety, self-esteem and perception of control. *J. Pediatr.* 1980;97:126-31.
- Zeltzer, L.; Kellerman, J.; Ellenberg, L., et al. Psychological effects of illness in adolescence. II. Impact of illness in adolescents, crucial issues and coping styles. *J. Pediatr.* 1980;97:132-8.
- Satterwhite, B. Impact of chronic illness on child and family; an overview based on five surveys with implications for management. *Int. J. Rehabil. Res.* 1978;1:7-17.
- Pless, I. B.; Roghmann, K. J. Chronic illness and its consequences. Observations based on three epidemiologic surveys. *J. Pediatr.* 1971;79:351-9.
- Coupey, S.; Cohen, M. Special considerations for the health care of adolescents with chronic illnesses. *Pediatr. Clin. N. Am.* 1984;31(1):211-9.

A group of five diverse medical professionals are gathered around, all reading 'Postgraduate Medicine' journals. In the foreground, an older man with a mustache and glasses reads intently. Next to him, a woman in a white lab coat smiles while eating an apple. To her right, a young man in a plaid shirt looks thoughtful. In the background, a woman in a blue lab coat and a man in green scrubs and a surgical cap also hold the journals. The journals are prominently displayed, showing the title 'Postgraduate Medicine' and a list of topics like 'Breastfeeding problems for rheumatic disease', 'Complications of COVID-19', and 'Pharmaceuticals for COVID-19'. The overall scene conveys a sense of continuous learning and professional development in the medical field.

The Journal of
Hospital Medicine
for the Primary Care
Physician

Volume 10 Number 1 February 1995

Postgraduate Medicine

Editorial
What is Cardiovascular
Medicine?
Authors

Physicians at Large
Authors

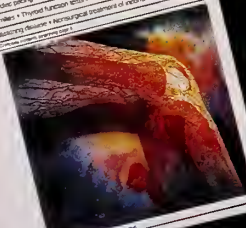
**Treatment paradigms for rheumatic disease: Onkapitola •
Sarcoidosis • Systemic sclerosis • Connective tissue diseases •
Pharmacokinetics for COPD • Systemic lymphoma • Cardiac
arrhythmia • Blood vessel disease in diabetes • Community doctors •
Cancer screening and gene screens • Caring across languages •
Smokers • Thyroid function tests • Child abuse • The oral cavity exam •
Bleeding disorders • Mechanical problems of respiration •
The new medical curriculum**

Illustrated by
Bob Gaulty

McGraw-Hill

0890-1261/95/020000-00\$05.00/0

© 1995 by McGraw-Hill, Inc.



Y
V



JMC
Grow
Hill

AIM HIGH

A PRESCRIPTION FOR PHYSICIANS

BOTHERED BY:

- ★ Too much paperwork?
- ★ The burden of office overhead?
- ★ Malpractice insurance costs?
- ★ Not enough time for the family?
- ★ No time to keep current with technology and new methods?
- ★ No time or money for professional development?

JOIN THE AIR FORCE MEDICAL TEAM; WE'LL PROVIDE THE FOLLOWING:

- ★ Competent and dedicated professional staff.
- ★ Time for patients and for keeping professionally current.
- ★ Financial security, a generous retirement for those who qualify.
- ★ If qualified, unlimited professional development.
- ★ Medical facilities all around the world.
- ★ 30 days of vacation with pay each year.
- ★ Complete medical and dental care.
- ★ Low cost life insurance.

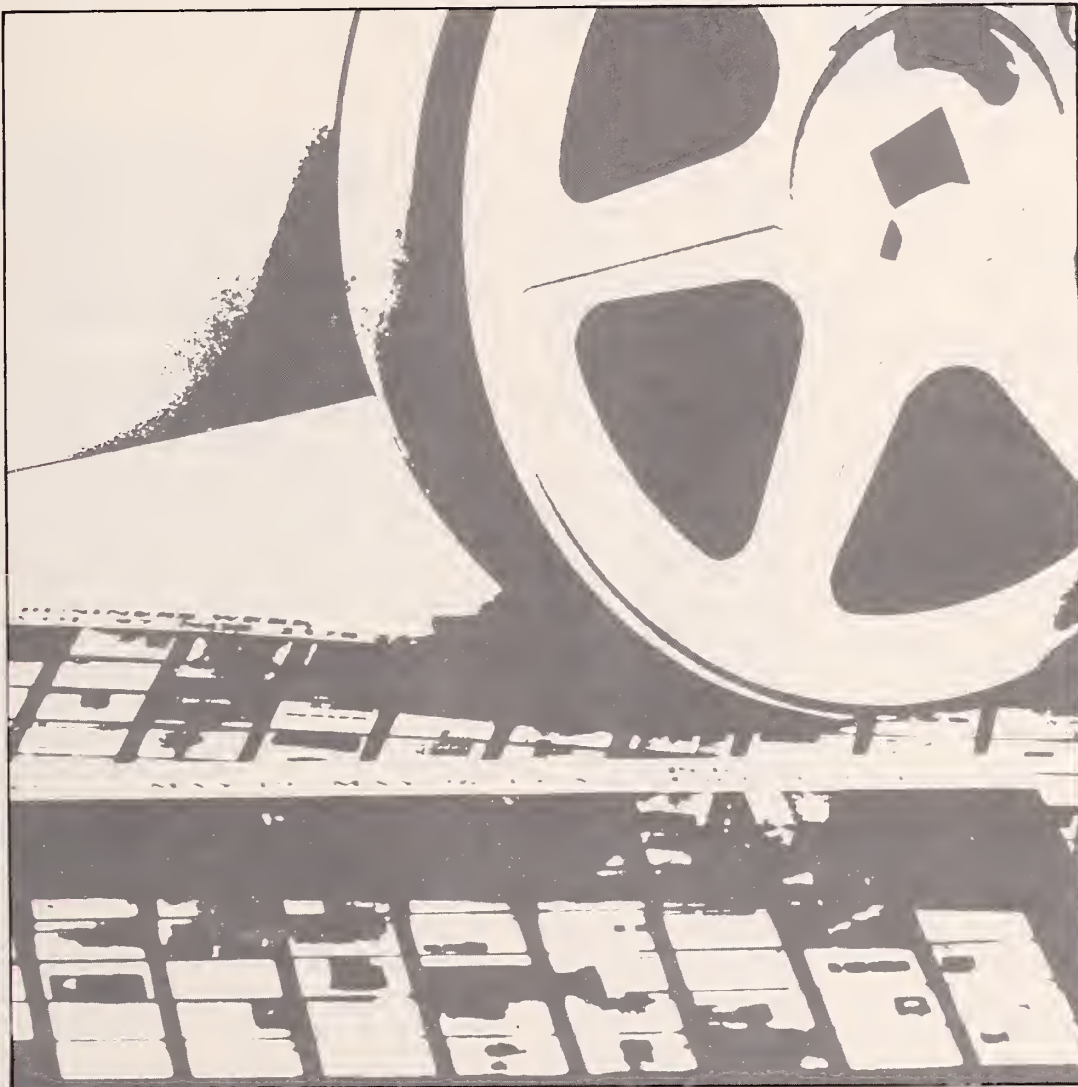
Want to find out more? Contact your nearest Air Force recruiter for information at no obligation. Call

SSgt Jauregui
(901)278-6349
Collect or
1-800-423-USAF Toll Free

**AIR
FORCE**



This Publication is available in Microform.



Please send additional information for _____
(name of publication)

Name _____

Institution _____

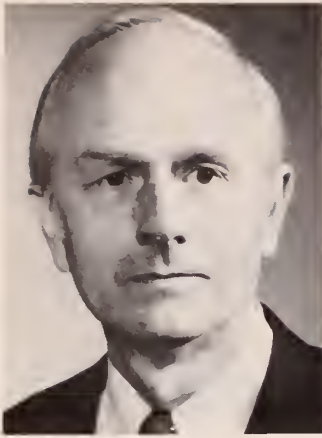
Street _____

City _____

State _____ Zip _____

**University
Microfilms
International**

300 North Zeeb Road, Dept. P.R., Ann Arbor, Mi. 48106



The President Speaking

Politics As Unusual

W. LAMAR WEEMS, M.D.
Jackson, Mississippi

The legislative session which is underway in Jackson may be the most momentous one in a lifetime. New faces, new philosophies, new political affiliations and new mandates will dominate the scene. The new governor is not just "whistling Dixie" when he declares that "change has come." It should be interesting to watch. This time around, however, physicians need to make politics more than a spectator sport.

Physicians were involved in political elections in 1987 as never before and, as a result, should be positioned to exercise more political influence than usual. Every year MSMA members receive a "call to arms" when the Mississippi State Legislature convenes, but this one is special. Extensive reorganization of state government is proposed. Reordering of governmental priorities is about to occur. Constitutional reform will be undertaken. The future of the state economically, educationally and culturally hangs in the balance.

The newly elected governor has made economic development his number one priority. The political agenda of MSMA fits that objective very well. Health care is the second or third largest industry in the state. Currently this industry is losing business to out-of-state competition, and federal support for care of the medically indigent is underutilized. With some help from state government, the health care industry offers great potential for economic development. High quality and accessible health care at reasonable prices also is an important factor in the decision of other industries to locate in Mississippi. Reform of the civil justice system realistically must be a part of any economic development package. The governor is playing our tune when he talks about economic development and the creation of jobs.

Assuming that many MSMA members will want to get involved, let me suggest how to proceed:

1. Pick your favorite issue or issues from the appended list on the adjacent page and become well informed.
2. Identify your key contacts in the Legislature.
3. Read the "Blue Sheet" carefully and regularly.
4. Give your input to MSMA Council on Legislation.
5. Call upon Bucky Murphy and Clare Elliott for information, advice and assistance (telephone 354-5433).
6. Volunteer to be a "Doctor of the Day" during the legislative session.
7. Become an activist.

MSMA's 1987 Legislative Proposals

- A. Civil Justice Reform Package. MSMA is participating in a business/professional coalition which is seeking enactment of the following:
1. Establish several, not joint, liability
 2. Set limits on non-economic damages
 3. Establish limits for punitive damages
 4. Abolish the collateral source rule
 5. Establish a sliding scale for contingency fees
 6. Establish procedures for dealing with frivolous lawsuits
 7. Abolish the appeal penalty
 8. Grant immunity from liability for volunteers
 9. Abolish jury service exemptions
 10. Shorten the statute of limitations
 11. Provide for periodic payments of judgments
 12. Medical Malpractice Package (which includes shortened statute of limitations on actions by minors as well as items 1, 2, 4, 5 and 11)
- B. Changes in Medicaid Program
1. Pilot program on case managers
 2. Maximize state funding to gain federal matching funds
 3. Expansion of benefits
- C. Mandatory Seat Belt Legislation
- D. Protection of public through denying expanded practice of certain health care providers.
- E. Support funding of State Department of Health for follow-up of HIV-positive individuals.
- F. Support other preventive health measures.

The Old Grey Flipper

I try not to say too much about my scuba diving because people look funny at me when I mention it. I get those looks that say, "and at *your* age" — like I should be ashamed of diving.

Ever since the swimming team at Ole Miss, I have enjoyed water sports and when scuba diving came along it was a whole new world to enjoy. At least twice a year for almost twenty-five years, I have deserted practice and the part of the family that won't go to those (Godforsaken) beautiful places to dive. Yes, it can be risky, but it is the nearest thing I know of to a oneness with the universe . . . where you really are a part of your environment . . . more than anywhere else.

As I have gotten older it seems that more and more of the dive groups I go with are younger people. Now and then you'll see a few old grey heads like me. After noting this a few years ago I almost hung up my flippers and regulator. Then I thought about Jacques Cousteau, who looks like he is ninety but really is only in his seventies, and still is an avid diver. I said, "what the heck," and went out and bought a newfangled bouyancy compensating vest, the best regulator, and the whole works so I could dive until *I'm* ninety. In order to dive you have to stay in reasonably good physical condition.

This brings me to the point of all this. It is not me selling you on sport diving, but on a lifetime of exercise, whatever sport you enjoy. The physical decline so often seen in the elderly is the result of a combination of factors: normal aging, specific disease processes, and inactivity. The last of these leads to various forms of disuse atrophy and contributes heavily to the general debility of age.

We physicians (and particularly we who are past

EDITORIAL/Continued

fifty years) can serve as role models not only for the younger physicians but for our patients as well. We preach preventive medicine now, so why should we not practice it ourselves? And remember, if you get a case of "bends" in Mt. Olive, Mississippi, call *me* as I am the resident specialist in diving medicine.

Thank God I'm a physician in this underwater world.

JOSEPH E. JOHNSTON, M.D.
Associate Editor

LETTERS

TO DR. WEEMS:

The president's page of October 1987 is an ambitious editorial but omits several salient factors.

Blue Cross accounts for only fifteen to twenty percent of most hospital and physician income, therefore these monies can be enlarged by a factor of five, bringing the total from 16.6 million to nearly 83 million. There is a small influx of monies from our sister states to Mississippi — amount unknown.

Quality *is* an issue — real or perceived. The patients leaving Mississippi do so because big name centers are geographically close (Oschner's Clinic has national name recognition) and because of the lack of internal referrals by Mississippi's physicians. Tupelo has developed an identity helped by having only one hospital. The rest of the medical centers are trying — trying to erode their local competitors market share.

The cost factor is deceptive. Yes, average per day hospital costs are lower in Mississippi but days of hospital stay per thousand population, are the highest in the nation. There is also a great difference between a day at Kilmichael Hospital and Baptist Medical Center, Jackson.

Third party payments blur cost and quality of care in a patient's mind. We all know, "the higher the price — the better the quality."

HMOs are dependent on large business for support and survival; however, business has been reluctant to enter the health-cost arena. Recent events show changes. Pre-admission review, second opinions, large deductibles, and changes in workman compensation payments prove that health care costs have affected the "bottom line."

Two additional factors which make cost control difficult are adjustments for contractual payments (medicare-medicare) and indigent care. Until these problems are solved, funds to continue operation will come from private patients and commercial insurance.

The indigent patient should be the responsibility of the entire society — not just those who use hospital services.

Medicine, in its largest sense, is not trusted as an able manager of health care resources. There are many obstacles to good management of health care, but the major responsibility for overcoming these obstacles lies with the physicians.

Worry began when health care costs approached ten percent of the gross national product. Hysteria occurred when it exceeded ten percent of the gross national product. What will happen when federal expenditure for health care exceeds the Department of Defense's budget?

KARL W. HATTEN, M.D.
Vicksburg, Mississippi

— Next Month in JOURNAL MSMA —

The Primary Care Physician's Role in Management of the Patient With Myelomeningocele

The Use of Allografts in Anterior Cervical Interbody Fusion

Peripartum Cardiomyopathy: A Case Report

MEDICAL ORGANIZATION

Ceremonies Mark Opening Of Headquarters Building

A weekend of festivities marked the dedication and official opening of the new four-story headquarters building at 735 Riverside Drive.

The celebration began November 20 with a dedication ceremony, ribbon-cutting, and tours of the building, and was completed November 21 with an open house.

Special guests included Dr. Alan Nelson, chairman of the AMA Board of Trustees; Jackson Mayor Dale Danks; and Lieutenant Governor Brad Dye. Governor-Elect Ray Mabus also was a guest speaker during the weekend, addressing a meeting of MSMA's Young Physicians Section.



Dr. Alan Nelson, chairman of the AMA Board of Trustees, spoke during dedication ceremonies for the new headquarters building.



MSMA President Lamar Weems, M.D., presided at the official opening.



Jackson Mayor Dale Danks, left, and Lt. Gov. Brad Dye were guest speakers at the dedication.




Dr. and Mrs. Ed Hill, left, were joined by Dr. Sidney Graves and Nancy Kintzel, right, in exchanging quips with podium guests before dedication ceremonies got underway. Dr. Hill is chairman of the MSMA Board of Trustees. Jean Hill, secretary of the AMA Auxiliary, is a past president of MSMA Auxiliary. Dr. Graves is delegate to the AMA and a past president of the MSMA. Nancy Kintzel is AMA field representative for Mississippi.



Above, MSMA Past President Dr. Ralph Brock and his wife, Billie, were photographed at the dedication ceremony.

At right, participating in the ribbon-cutting ceremony were Dr. Faser Triplett and Mrs. Joe Herrington. Dr. Triplett, a past president of MSMA, is president and chairman of the board of Medical Assurance Company. Peggie Herrington is 1987-88 president, MSMA Auxiliary.





WE'RE ALWAYS ON CALL. 1-800-352-2226

Call the travel specialists toll-free!

When you come down with the urge or necessity to travel, call Avanti for expert service. Everything we do for you is free of charge, even the phone call.

Our travel specialists will take care of all your plans, plane reservations, car rental, hotel accommodations and much more. We're here to help you with charters, tours, cruises, personal vacations, business meetings and conventions.

The next time you make travel arrangements, remember Avanti is always on call, toll-free.

AVANTI
TRAVEL, INC.

Three Lakeland Circle • Jackson, Mississippi 39216 • 981-9111
Call Toll-Free Nationwide 1-800-327-4236

Dr. Rhodes Named UMC Surgery Department Head

Dr. Robert S. Rhodes has been named the James D. Hardy Professor of Surgery and chairman of the Department of Surgery at the University of Mississippi Medical Center.

Dr. Norman C. Nelson, vice chancellor of health affairs, announced his appointment following approval by the Board of Trustees of State Institutions of Higher Learning.

Dr. Rhodes succeeds Dr. James D. Hardy, who retired in October, 1987. Dr. Hardy came to the Medical Center in 1955 as its first chairman of surgery. The James D. Hardy Chair of Surgery is being endowed by former residents, students, colleagues and friends of Dr. Hardy who wish to perpetuate the ideals he has practiced as a preeminent surgeon-scientist and dedicated educator.

"We are enormously pleased to have a surgeon



of Dr. Rhodes' caliber assume the Hardy Chair of Surgery. He brings exceptional credentials and experience in academic medicine to the Medical Center," Dr. Nelson said.

Dr. Rhodes, who was professor of surgery and chief of general surgery at Case Western Reserve University, attended Cornell University and earned the M.D. in 1967 at the State University of New York Upstate Medical Center. He did his internship at the University Hospitals of Cleveland, followed by residencies in surgery in 1969 and 1973. He also took a fellowship in electron microscopy in 1971 at Harvard Medical School.

A Major in the U.S. Air Force Medical Corps from 1973-1975 at the USAF Regional Hospital at Shaw Air Force Base in Sumter, South Carolina, Dr. Rhodes joined the faculty of Case Western Reserve University in 1975 as senior instructor in surgery. He then rose through the ranks in promotions as assistant professor of surgery in 1976, associate professor of surgery in 1981, and professor of surgery and chief of general surgery in 1986. He also served as associate director of the General Surgery Academic Training Grant from 1977-1979.

Culpepper Lecturer at UMC



Dr. Charles W. Cummings (right), from the Department of Otolaryngology and Head and Neck Surgery at the University of Washington in Seattle, was the annual Charles E. Culpepper Foundation Visiting Professor at the University of Mississippi Medical Center. Prior to his lecture on "Resurfacing of Surgically Created Oral Cavity Defect: An Expanded Menu of Methods" he talked with Dr. Winsor Morrison, chairman of the UMC Department of Otolaryngology.

PRINTING — OFFICE SUPPLIES

EQUIPMENT — FURNITURE



Premier Printing Company

2485 West Capitol

Jackson, Mississippi

Phone 352-4091

PERSONALS

PAUL ALLEN of Pascagoula spoke on cancer prevention at a meeting of that city's Zonta Club.

VINOD ANAND of UMC presented a paper at the Asia Oceania Congress of Otorhinolaryngological Societies in New Delhi, India.

G. CHRISTOPHER BALL of Jackson has been certified as a diplomate of the American College of Obstetrics and Gynecology.

W. O. BARNETT of the Continent Ostomy Center in Jackson and National Medical Enterprises Corporation (NME) have jointly established a National Continent Ostomy Center in the Tampa Bay area of Florida.

JAMES CADE of Hattiesburg has been certified by the American Board of Emergency Medicine.

C. RON CANNON of Brandon was on the faculty for the Southern Region scientific program (in Birmingham) for the American Academy of Facial Plastic and Reconstructive Surgery.

CHING CHEN of UMC presented a paper at the Southern Medical Association meeting in San Antonio.

BERTIN CHEVIS of Bay St. Louis participated in an AIDS awareness program in that community.

BRYAN COWAN of UMC was visiting professor at the LSU Medical Center in Shreveport.

DEWITT CRAWFORD of Louisville recently was installed as president of the East Mississippi Medical Society.

KEN CRONIN of Jackson has been named to the board of trustees of the Bessie S. Speed Alcohol and Drug Education Center at the University of Mississippi.

C. RALPH DANIEL, III, of Jackson presented a paper on nail disorders at the annual meeting of the American Academy of Dermatology in San Antonio.

SUMAN DAS of UMC delivered papers at meetings of the American Association for Surgery of the Hand in San Juan, Puerto Rico, and the American Association of Plastic and Reconstructive Surgeons in Atlanta.

A. LEWIS FARR of Greenville announces his retirement from the practice of internal medicine.

JOHN Y. GIBSON of UMC has been designated a

Senior Member of the American Institute of Ultrasound in Medicine by the organization's Board of Governors for his contributions to the field of medical ultrasound.

RICHARD J. FIELD of Centreville spoke on "Socioeconomic Problems in Surgery Today" at the meeting of the American Society of Plastic and Reconstructive Surgeons in Atlanta.

The article "Anterior Cruciate Ligament Repairs in World Class Skiers" by ROBERT W. HIGGINS of Jackson has recently been published in *The American Journal of Sports Medicine*. J. R. Steadman, M.D. of South Lake Tahoe, California, was co-author.

JAMES HUGHES of UMC was on the faculty for a course in Davos, Switzerland and was speaker at the Houston Clinic in Columbus, Georgia.

DAN W. JACKSON of Rolling Fork has been elected to the Board of Directors of Mississippi Heart Association.

DAN KEEL of Brookhaven was king of Brookhaven's annual Harvest Ball.

KENT KIRCHNER of UMC made a presentation at the meeting in Chicago of the Central Society of Clinical Research.

Gamble Brothers & Archer Clinic of Greenville announces the association of WILLIAM S. MAYO for the practice of ophthalmology.

JOHN W. MCFADDEN of Tupelo assisted in teaching a course at the annual scientific meeting of the American Academy of Neurological and Orthopaedic Surgeons in Las Vegas.

FRANK J. MORGAN, JR. of Jackson was consultant to the Puerto Rico Board of Medical Examiners for the administration of the FLEX examination recently. Dr. Morgan is a member of the FLEX Board of the Federation of State Medical Boards.

JOHN MORRISON of UMC lectured at the Third Annual Perinatal Meeting on Progress in Milwaukee, Wisconsin and at the American College of Obstetricians and Gynecologists meeting in New York.

CHARLES W. MURRY of Oxford announces his retirement from the practice of ophthalmology and otolaryngology.

ANN MYERS has associated with Southern Center for Arthritis Surgery in Hattiesburg, for the practice of arthritis and rheumatology.

PERSONALS/Continued

MITCHELL J. MYERS has associated with Neurological Associates in Jackson.

WILLIAM NICHOLAS of UMC spoke to the staff of St. Francis Hospital in Monroe, Louisiana, and at the centennial celebration of the Halifax Infirmary in Halifax, Nova Scotia, Canada.

HOWARD NICHOLS of UMC was an examiner for the American Board of Pediatrics in Philadelphia, Pennsylvania.

LINDA ROCKHOLD has associated with Southern Center for Arthritis Surgery for the practice of arthritis and rheumatology.

D. C. RUDEEN of Picayune announces his association with D. L. BOLTON for the practice of family medicine.

NATHAN P. SHAPPLEY of Hattiesburg was inducted into the American College of Surgeons at its annual meeting in San Francisco.

KEITH SMITH of Natchez has been named a fellow of the American College of Surgeons.

PATRICK TARPY of McComb was guest speaker at a fundraising event for the McComb Chapter of the Mississippi Association for Sickle Cell Disease.

CHARLES THOMPSON of Columbia recently was honored upon his retirement after 50 years in the practice of medicine.

BILLY WALKER of Jackson has been named chief of staff at Doctors Hospital. JAMES K. HENSARLING was named chief-elect.

JAMES E. WARRINGTON, SR., of Clarksdale has been recertified as a diplomate of the American Board of Family Practice.

W. LAMAR WEEMS of UMC was visiting professor at LSU Medical Center in New Orleans.

C. K. WHITE of Tupelo was inducted into membership in the Central Association of Ob-Gyn at the October meeting in Tarpon Springs, Florida.

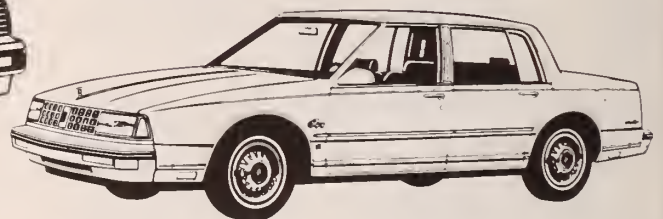
WILLIAM M. WOOD, former chief of psychiatry at Biloxi VA Medical Center, has been named clinical director of East Mississippi State Hospital in Meridian.

Oldsmobile Quality. Feel it.



Toronado Coupe

Deal with the Dealer
Chosen by the MSMA



Ninety-Eight Regency Brougham Sedan

"CONVENIENT & COURTEOUS SERVICE"

ASK FOR OUR SPECIAL "COST PLUS" PLAN FOR MSMA MEMBERS!

HARRELD CHEVY-OLDS

CALL BRIAN KING 601-354-2233

NEW MEMBERS

ALLRED, CECELIA G., Jackson. Born Starkville, MS, Jan. 22, 1951; M.D., University of Mississippi School of Medicine, Jackson, 1978; internal medicine residency, University Medical Center, Jackson, 1979-81; oncology fellowship, same, 1981-83; elected by Central Medical Society.

BOMBARD, ALLAN T., Ocean Springs. Born Schenectady, NY, Jan. 12, 1953; M.D., George Washington University School of Medicine and Health Science, Washington, D.C., 1980; interned, Wilford Hall USAF Medical Center, San Antonio, TX, one year; ob-gyn residency, same, 1981-84; clinical genetics, Northwestern University, Chicago, 1984-86; elected by Singing River Medical Society.

BOYD, JAMES WILSON, Tupelo. Born Memphis, TN, Jan. 15, 1952; M.D., University of Tennessee Center for Health Sciences, Memphis, 1982; interned, Methodist Hospital, Memphis, one year; radiology residency, University of Iowa, Iowa City, 1982-83; radiology residency, Methodist Hospital, Memphis, 1984-87; elected by Northeast Mississippi Medical Society.

BUDDEN, JEFFERY PAUL, Jackson. Born Baton Rouge, LA, Oct. 16, 1954; M.D., Louisiana State University School of Medicine, New Orleans, 1981; interned, University Medical Center, Jackson, MS, one year; surgery and vascular surgery residency, same, 1982-87; elected by Central Medical Society.

CARRELL, ROBERT PAUL, Meridian. Born Wichita, KS, Dec. 1, 1944; M.D., Kansas University School of Medicine, Kansas City, 1971; interned, Maricopa County Hospital, Phoenix, AZ, one year; surgery residency, St. Anthony's, Oklahoma City, OK, 1974-75; otolaryngology residency, Oklahoma University, 1975-76; anesthesiology residency, same, 1976-78; elected by East Mississippi Medical Society.

CHISM, JIMMY, New Albany. Born Tupelo, MS, Jan. 6, 1955; M.D., University of Mississippi School of Medicine, Jackson, 1982; interned, Charity Hospital, New Orleans, one year; ob-gyn residency, Tulane Affiliated Hospitals, New Orleans, 1983-86; elected by Northeast Mississippi Medical Society.

CUMMINGS, JAMES AMSON, Corinth; Born Chattanooga, TN, March 20, 1956; M.D., University of

South Alabama School of Medicine, Mobile, 1982; interned, St. Louis University Hospital, St. Louis, MO, one year; surgery residency and urology residency, same, 1983-87; elected by Northeast Mississippi Medical Society.

DENNEY, SAM JOSEPH, Pontotoc. Born Memphis, TN, April 20, 1923; M.D., Vanderbilt University School of Medicine, Nashville, 1953; interned, Baptist Memorial Hospital, Memphis, one year; surgery residency, Memphis, 1956-61; elected by Northeast Mississippi Medical Society.

DENYER, MICHAEL H., Hattiesburg. Born Bartlesville, OK, March 4, 1953; M.D., Baylor College of Medicine, Houston, TX, 1978; interned, Baylor Affiliated Hospitals, Houston, one year; surgery residency, University of Oklahoma, Oklahoma City, 1979-81 and 1982-84; thoracic and peripheral vascular surgery residency, Charlotte Memorial Hospital, Charlotte, NC, 1985-87; elected by South Mississippi Medical Society.

EASTERLING, S. RANDALL, Vicksburg. Born Houston, TX, Oct. 13, 1951; M.D., University of Mis-



**We earn
your trust every day.™**



Trustmark™
National Bank

Jackson/Bogue Chitto/Brookhaven/Canton/Clinton/Columbia
Georgetown/Gloster/Greenville/Greenwood/Hattiesburg/Hazlehurst
Leland/Liberty/Madison/Magee/McComb/Pearl/Petal/Ridgeland
Tylertown/Wesson

Member FDIC

NEW MEMBERS/Continued

Mississippi School of Medicine, Jackson, 1984; interned Regional Medical Center, Tuscaloosa, AL, 1984-85; elected by West Mississippi Medical Society.

EDMONDSON, MARSHALL G., Tupelo. Born Minden, LA, Sept. 29, 1944; M.D., University of Mississippi School of Medicine, Jackson, 1971; interned and radiology residency, University Medical Center, Jackson, MS, 1971-72 and 1975-78; elected by Northeast Mississippi Medical Society.

ELDRIDGE, ANTHONY RAY, Tupelo. Born Leitchfield, KY, Dec. 15, 1955; M.D., University of Tennessee Center for Health Sciences, Memphis, 1985; interned and anesthesiology residency, University Medical Center, Jackson, MS, 1984-87; elected by Northeast Mississippi Medical Society.

GADDY, DONALD KEITH, Gulfport. Born Alexandria, LA, March 25, 1957; M.D., University of Mississippi School of Medicine, Jackson, 1983; interned and ob-gyn residency, University Medical Center, Jackson, 1982-87; elected by Coast Counties Medical Society.

HARLESS, STEPHEN L., Purvis. Born Hattiesburg, MS, April 25, 1957; M.D., University of Mississippi School of Medicine, Jackson, 1984; interned and family practice residency, University of Alabama, Selma, 1984-87; elected by South Mississippi Medical Society.

MATHIS, ROBERT PHILLIPS, Tupelo. Born El Paso, TX, Sept. 25, 1956; M.D., University of Mississippi School of Medicine, Jackson, 1982; interned and surgery residency, University of Kentucky Hospitals, Lexington, 1982-87; elected by Northeast Mississippi Medical Society.

MCDONNELL, FRED JAMES, Hazlehurst. Born Jackson, MS, Dec. 27, 1947; M.D., University of Mississippi School of Medicine, Jackson, 1974; elected by South Central Medical Society.

MCGRAW, JOHN JAY, Brookhaven. Born Munich, Germany, Feb. 2, 1951; M.D., University of Mississippi School of Medicine, Jackson, 1978; interned Spartanburg General Hospital, Spartanburg, SC, one year; orthopedic surgery residency, University Medical Center, Jackson, MS, 1979-80 and St. Louis University Medical Center, St. Louis, MO, 1982-85; elected by South Central Medical Society.

MISSISSIPPI CHAPTER

Association of Consulting Foresters

When professional forestry services are



needed call a qualified consulting forester.



Attorneys, bankers, CPA's, doctors, and others know the value of utilizing the expertise of other professionals to help solve technical problems and to meet the needs of their clients. Their reputation and success depends on the quality of their advice.

Forestry is a complex and technical business; expert advice is often needed for appraisals, management, timber sales, reforestation, resource analysis, computer applications, taxes, legal, or estate questions.

You need a professional forester you can trust. Members of the Mississippi Association of Consulting Foresters provide complete and reputable services to forest landowners and related business professionals. The ACF designation is your assurance of high standards of training and ethics. For referral to the nearest ACF Consulting Forester, write or call MS Chapter of ACF, Route 2, Box 706, Starkville, MS 39759, 601-323-3896.

MOLL, GEORGE W., JR., Jackson. Born Milwaukee, WI, Nov. 23, 1947; M.D., University of Chicago Pritzker School of Medicine, Chicago, 1977; interned one year and one-year pediatric residency, University of Michigan, Mott Children's Hospital, Ann Arbor, 1977-79; pediatric endocrinology fellowship, University of Chicago, 1979-81; elected by Central Medical Society.

NEWELL, SAMUEL D., JR., Tupelo. Born Greenwood, MS, Oct. 24, 1956; M.D., University of Mississippi School of Medicine, Jackson, 1983; interned and neurology residency, University Medical Center, Jackson, MS, 1983-87; elected by Northeast Mississippi Medical Society.

OLIVER, ROBERT PHILLIP, Greenville. Born Pensacola, FL, May 4, 1942; M.D., University of South Florida College of Medicine, Tampa, 1968; interned one year, Los Angeles County General Hospital, Los Angeles, CA; radiology residency, University of Alabama, Birmingham, 1974-77; one-year fellowship, University of New Mexico, Albuquerque, elected by Delta Medical Society.

O'NEAL, SUSAN D., Greenville. Born Marion, IL,

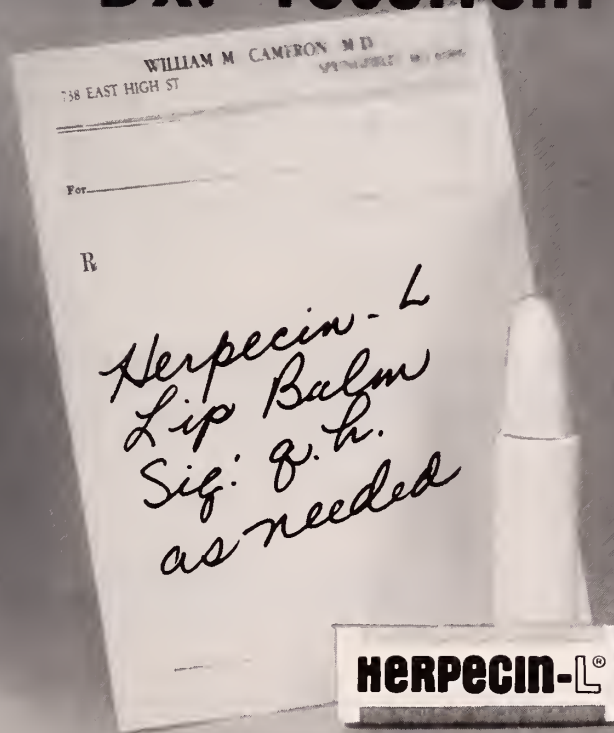
Feb. 11, 1954; M.D., University of Mississippi School of Medicine, Jackson, 1979; interned and pediatric residency, University Medical Center, Jackson, MS, 1979-82; elected by Delta Medical Society.

PERKINS, LYNDON H., Tupelo. Born Beaumont, TX, Feb. 16, 1955; M.D., University of Mississippi School of Medicine, Jackson, 1982; interned, medicine residency and pulmonary medicine residency, University Medical Center, Jackson, MS, 1982-87; elected by Northeast Medical Society.

ROWLEN, DENNIS W., Brandon. Born Eupora, MS, Dec. 30, 1954; M.D., University of Mississippi School of Medicine, Jackson, 1981; interned and pediatrics residency, University Medical Center, Jackson, MS, 1981-85; elected by Central Medical Society.

SLOCUM, WAYNE A., Tupelo. Born Baton Rouge, LA, Feb. 4, 1957; M.D., Louisiana State University School of Medicine, New Orleans, 1983; interned and ob-gyn residency, University Medical Center, Jackson, MS, 1983-87; elected by Northeast Mississippi Medical Society.

Dx: recurrent herpes labialis



"HERPECIN-L is my **treatment of choice** for perioral herpes." GP, NY

"HERPECIN-L appears to actually **prevent** the blisters . . . used **soon enough**." DDS, MN

"HERPECIN-L® . . . a **conservative approach** with **low risk/high benefits**." MD, FL

"Used at **prodromal symptoms** . . . blisters **never formed** . . . remarkable." DH, MA

"(In clinical trials) . . . **response was dramatic**. HERPECIN-L . . . proven **far superior**." DDS, PA

"All patients claimed **shorter duration** . . . at **prodromal symptoms** . . . HERPECIN-L **averted** the attacks." MD, AK

OTC. See P.D.R. for information. For samples to make your own clinical evaluation, write: CAMPBELL LABORATORIES, INC., P.O. BOX 812-MD, FDR STATION, NEW YORK, N.Y. 10150

In Mississippi HERPECIN-L is available at all *Eckerd, K & B, Revco, and Super D* and other select pharmacies.

NEW MEMBERS/Continued

SMITH, JEANNE ANN, Summit. Born Meridian, MS, Aug. 27, 1956; M.D., University of Mississippi School of Medicine, Jackson, 1980; interned one year, University Medical Center, Jackson, MS; anesthesiology residency, University of Texas, Galveston, 1981-83; elected by South Central Medical Society.

TATE, ROBERT P., Holly Springs. Born Memphis, TN, April 10, 1947; M.D., University of Tennessee Medical School, Memphis, 1972; interned and family medicine residency, Baptist Memorial Hospital, Memphis, 1972-75; elected by North Mississippi Medical Society.

TUTOR, JAMES DUDLEY, Greenville. Born Memphis, TN, May 1, 1957; M.D., University of Mississippi School of Medicine, Jackson, 1983; interned one year, University Medical Center, Jackson, MS; pediatric residency, Children's Hospital, Chat-

tanooga, TN, 1985-87; elected by Delta Medical Society.

WATSON, WILLIAM BRUCE, Jackson. Born Charlotte, NC, March 25, 1955; M.D., Duke University School of Medicine, Durham, NC, 1981; interned and emergency medicine residency, University of Pittsburgh, Pittsburgh, PA, 1982-85; elected by Central Medical Society.

WILLIAMS, A. TERREL, Jackson. Born Natchez, MS, Nov. 21, 1954; M.D., University of Mississippi School of Medicine, Jackson, 1980; interned one year, Tulane Division of Charity Hospital, New Orleans; ophthalmology residency, University Medical Center, Jackson, MS, 1984-87; elected by Central Medical Society.

The editors welcome your comments, suggestions, and inquiries. Please address correspondence to JOURNAL MSMA, P.O. Box 5229, Jackson, MS 39216.

Sampson Howard & Ashcraft

Insurance Resource

Providers of Medical Malpractice Insurance

announces
the relocation of our offices.

825 Ridgewood Road
Ridgeland, Mississippi 39157

956-3720

POSTGRADUATE CALENDAR

March

NUCLEAR MEDICINE UPDATE

March 5

Ramada Renaissance Hotel, Jackson

SURGICAL FORUM

March 10-12

Holiday Inn Downtown, Jackson

April

SPRING SONIC SYMPOSIUM

April 9

Natchez Eola Hotel, Natchez

1988 MISSISSIPPI OPHTHALMOLOGY SPRING
MEETING

April 9-10

Holiday Inn Downtown, Jackson

DIAGNOSIS AND TREATMENT OF INFECTIONS IN
DIABETES MELLITUS

April 27-30

Ramada Renaissance Hotel, Jackson

For more information or a program brochure,
contact the University of Mississippi Medical Center
Division of Continuing Health Professional Education,
2500 North State Street, Jackson, Mississippi
39216-4505; or call (601) 984-1300.

120th Annual Session

June 15-19, 1988

Biloxi, Mississippi

Plan Now to Attend!

Review A Book

Members of MSMA interested in reviewing any of these volumes should address requests to Editor, JOURNAL MSMA. After submitting a review for publication, you may keep the book for your personal library.

Neurology: Problems in Primary Care. James L. Bernat, M.D. and Frederick M. Vincent, M.D. Oradell, New Jersey: Medical Economics Books, 1987.

Neuroanatomy: An Atlas of Structures, Sections and Systems.

Duane E. Haines, Ph.D. Baltimore, Maryland: Urban & Schwarzenberg, 1987. \$22.50.

Does Your Office Use ENVELOPES?

5000 for \$99⁹⁵

(#10 Reg. Add 10%
for Window Envelopes)

Up to four lines printed in upper left corner.
Packed 500 per box. Price includes your imprint
in black or standard red, blue or green ink.

Mississippi Residents add 6% Sales Tax

All **Prepaid Orders** will be shipped on our
trucks or UPS at no additional charge

Mail or Phone Orders To:

Northtowne Printers

3909 Northview Dr.
Jackson, MS 39206

(601) 981-2675

MEETINGS

National and Regional

American Medical Association, Annual Meeting, June 26-30, 1988, Chicago. James H. Sammons, Executive Vice President, 535 N. Dearborn St., Chicago, IL 60610.

State and Local

Mississippi State Medical Association, 120th Annual Session, June 15-19, 1988, Biloxi. Charles L. Mathews, Executive Secy., 735 Riverside Drive, P.O. Box 5229, Jackson 39216.

Mississippi Academy of Family Physicians, Annual Meeting, July 27-30, 1988, Biloxi. Mrs. Alyce Palmore, Executive Secy., P.O. Box 12330, Jackson 39211.

Amite-Wilkinson Counties Medical Society, 3rd Monday, March, June, September, December. James S. Poole, Secy., The Gloster Clinic, Gloster 39638. Counties: Amite, Wilkinson.

Central Medical Society, 1st Tuesday, February, April, October, December, 6:30 p.m., Primos Northgate Restaurant, Jackson. Patsy Douglas, Executive Secy., 735 Riverside Dr., Jackson, MS 39202. Counties: Hinds, Leake, Madison, Rankin, Scott, Simpson.

Claiborne County Medical Society, 1st Tuesday, each month, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Secy., P.O. Box 147, Port Gibson 39150. County: Claiborne.

Clarksdale and Six Counties Medical Society, 3rd Wednesday, April, and 1st Wednesday, November, 2:00 p.m., Clarksdale. Rodney Baine, Secy., 110 Yazoo Ave., Clarksdale 38614. Counties: Coahoma, Quitman, Tallahatchie, Tunica. Coast Counties Medical Society, January, May, and November. H. S. Barrett, Secy., P.O. Box 1810, Gulfport 39501. Counties: Hancock, Harrison, Stone.

Delta Medical Society, 2nd Wednesday, April and October. Walter H. Rose, Secy., 122 E. Baker St., Indianola 38751. Counties: Bolivar, Humphreys, Leflore, Sunflower, Washington, Yazoo.

DeSoto County Medical Society, 3rd Thursday, February and August, 1:00 p.m., Kenny's Restaurant, Hernando. Malcolm D. Baxter, Jr., Secy., Baxter Clinic, Hernando 38632. County: DeSoto.

East Mississippi Medical Society, 1st Tuesday, February, April, June, October, December. Charles L. Wilkinson, Secy., Mail: Ms. Jenkins, P.O. Box 4053, Meridian 39305. Counties: Clarke, Kemper, Lauderdale, Neshoba, Newton, Winston.

Homochitto Valley Medical Society, Meetings scheduled quarterly. Fred G. Emrick, Secy., P.O. Box 1488, Natchez 39120. Counties: Adams, Jefferson.

North Central District Medical Society, 3rd Wednesday, March, June, September, January. Charles S. Watras, 612 Summit St., Winona 38967. Counties: Attala, Carroll, Choc-taw, Grenada, Holmes, Montgomery, Webster.

Northeast Mississippi Medical Society, 1st Thursday, March, June, September, December. Roger L. Lowery, Secy., 618 Pegram Dr., Tupelo 38801. Counties: Alcorn, Calhoun, Chickasaw, Itawamba, Lee, Monroe, Pontotoc, Prentiss, Tishomingo, Union.

North Mississippi Medical Society, 1st Thursday, April, September, December. Cherie Friedman, Secy., 424 South 5th, Oxford 38655. Counties: Benton, Lafayette, Marshall, Panola, Tate, Tippah, Yalobusha.

Pearl River County Medical Society, 2nd Monday, March, June, September, December. J. C. Griffing, Secy., Crosby Memorial Hospital, Picayune 39466. County: Pearl River.

Prairie Medical Society, 2nd Tuesday, March, June, September, December. R. Ray Lyle, Secy., P.O. Box 1507, Starkville, MS 39759. Counties: Clay, Oktibbeha,

Singing River Medical Society, 1st Wednesday, February, April, June, August, October, December. John J. McCloskey, Secy., 3003 Short Cut Rd., Pascagoula 39567. County: Jackson.

South Central Mississippi Medical Society, 2nd Tuesday, March, June, September, December. Julian T. Janes, Secy., 304 Clark, McComb 39648. Counties: Copiah, Franklin, Lawrence, Lincoln, Pike, Walthall.

South Mississippi Medical Society, 2nd Thursday, March, June, September, December. George R. Bush, Secy., 307 S. 13th Ave., Laurel 39440. Counties: Covington, Forrest, George, Greene, Jasper, Jefferson Davis, Jones, Lamar, Marion, Perry, Smith, Wayne.

West Mississippi Medical Society, 2nd Tuesday, January, March, May, September, October, November, 6:30 p.m., Maxwell's Restaurant, Vicksburg. Martin E. Hinman, Secy., The Street Clinic, Vicksburg 39180. Counties: Issaquena, Sharkey, Warren.

Mississippi Institutions and Organizations Accredited for Continuing Medical Education

The following Mississippi institutions and medical organizations have been accredited in accordance with the "Essentials for Accreditation of Institutions and Organizations Offering Continuing Medical Education Programs" of the Liaison Committee on Continuing Medical Education. Information concerning CME programs for physicians offered by these accredited sources may be obtained by writing the Director, Continuing Medical Education, at the individual institution or organization.

Council on Scientific Assembly
Mississippi State Medical Association
735 Riverside Drive
Jackson, MS 39202

North Mississippi Medical Center
830 Gloster Avenue
Tupelo, MS 38801

Forrest General Hospital
Box 1897
Hattiesburg, MS 39401

Mississippi Baptist Medical Center
1225 N. State Street
Jackson, MS 39201

Gulf Coast Community Hospital
4642 W. Beach Boulevard
Biloxi, MS 39531

Jefferson Davis Memorial Hospital
Box 1488
Natchez, MS 39120

King's Daughter Hospital
Box 948
Brookhaven, MS 39601

Riverside Hospital
Lakeland Drive
Jackson, MS 39208

Biloxi Regional Medical Center
1559 Lafayette St.
Biloxi, MS 39533

Jeff Anderson Regional Medical Center
2124 14th St.
Meridian, MS 39301

Northwest Mississippi Regional Medical Center
Box 1218
Clarksdale, MS 38614

North Panola County Hospital
Drawer 160
Sardis, MS 38666

Singing River Hospital
P.O. Box 112
Pascagoula, MS 39567

Magnolia Hospital
Alcorn Drive
Corinth, MS 38834

Greenwood Leflore Hospital
1508 Leflore Avenue
Greenwood, MS 38930

Gulfpport Memorial Hospital
4500 13th Street
Gulfpport, MS 39501

Oxford-Lafayette County Hospital
P.O. Box 946
Oxford, MS 38655

St. Dominic-Jackson Memorial Hospital
969 Lakeland Dr.
Jackson, MS 39216

Delta Medical Center
P.O. Box 5247
Crossroads Station
Greenville, MS 39704-5247

Methodist Hospital
P.O. Box 1311
Hattiesburg, MS 39401

Medico-Legal Brief

New Trial For Malpractice Suit Against Chiropractor

A chiropractor was entitled to a new trial of a malpractice claim against him, a Wisconsin appellate court ruled.

A patient consulted the chiropractor on September 13, 1982, because of soreness in the upper shoulders and neck and numbness in his hands. The patient had previously consulted the chiropractor in 1979, because of pain in his lower back. The chiropractor analyzed a subluxation of the C-1 vertebra and performed an adjustment. In the next two weeks the chiropractor performed three or four additional adjustments of the patient's back.

After the consultations, the patient's condition deteriorated and, in November 1982, a neurosurgeon diagnosed the patient's condition as a decompressed spinal column. The patient underwent surgery, which resulted in temporary relief. However, in June 1983, his condition again deteriorated. Further surgery revealed a herniated disc at the C-5/C-6 level of the cervical spine.

In an action against the chiropractor, the patient claimed that he improperly diagnosed his condition. The trial court instructed the jury that a chiropractor must exercise the same degree of care and skill that was usually exercised by a recognized school of the medical profession. A jury returned a verdict in favor of the patient, and the chiropractor appealed.

Reversing the decision, the appellate court said that the trial court's instruction to the jury was erroneous. The chiropractor owed a duty to exercise reasonable care and was held to the same standard of care as a reasonable chiropractor in the same or similar circumstances, the court said. That standard required a chiropractor to recognize a medical problem, refrain from further chiropractic treatment when a reasonable chiropractor should be aware that the patient's condition was not amenable to chiropractic treatment and continuation of treatment may aggravate the condition. The practice of chiropractic was not the practice of medicine, and a chiropractor was not held to the same standard of care as a physician. — *Kerkman v. Hintz*, 406 N.W.2d 156 (Wis.Ct. of App., March 11, 1987).

The Most Logical Choice



Medical Office Management System

Designed to meet the information needs of the individual practice or large group, physicians across the country are enjoying increased revenue, more accurate financial reporting, and total control of their accounts receivable with MDLogix's variety of features including . . .

- On-line patient inquiry
- On-line transaction posting
- Batch posting
- Insurance Claim Tracking
- Cycle Billing
- Collection Letters
- Appointment Scheduling
- Electronic Claims Submission
- Hospital Census Reporting
- Procedure & Diagnosis History
- Comprehensive Revenue and Service Reports
- Patient Recall
- Payment Allocation
- General Ledger
- Accounts Payable
- Payroll
- And Much More

For more information, call or write

DP Associates

805 S. Wheatley, Suite 325
Ridgeland, MS 39157-9983

(601) 957-3299

PLACEMENT SERVICE

PHYSICIANS AVAILABLE

BOARD CERTIFIED RADIOLOGIST available part time in Jackson or surrounding small community hospitals. Contact: Box Y, MSMA, P.O. Box 5229, Jackson, MS 39216.

PHYSICIAN COMPLETING RESIDENCY in obstetrics and gynecology seeks practice opportunity in Mississippi. Available July 1989. Contact Greg Patton, M.D., 2325 Glenmary Avenue #2, Louisville, KY 40204.

EXPERIENCED PHYSICIAN, seeking licensure, wants position as assistant. Location flexible. P.O. Box 225, Bay Springs, MS 39422.

A Commitment to Excellence in Health Care

Mississippi Emergency Association, P.A. (MEA) a physician-owned and managed group has created an environment for physicians that promotes the ideals of private practice while freeing doctors from the administrative and financial demands of the private practitioner.

Board certified or board eligible physicians in the area of Emergency Medicine, Internal Medicine, and Family Medicine are presented a variety of professional and personal rewards, including excellent salaries, benefits, and advancement opportunities.

MEA is a dynamic, growing corporation that delivers quality health care. If you would like to know what career opportunities we can offer you, send your curriculum vitae to Sheila M. Stringer or call (601) 366-6503.

**Mississippi Emergency
Association, P.A.
P.O. Box 12917
Jackson, MS 39236-2917**

PHYSICIANS WANTED

EMERGENCY PHYSICIANS WANTED. Part-time and full-time positions in northeast Mississippi. Call (601) 328-8385.

MULTI-SPECIALTY CLINIC seeks BC/BE Hematologist/Oncologist. Modern, fully equipped 220 bed hospital. Contact John Wallace, Internal Medicine Clinic, 1203 Jefferson Street, Laurel, MS; (601) 649-6382 or MS WATS 1-800-654-7918.

IMMEDIATE OPPORTUNITY for medical director and part-time physicians. Family/General/Internal Medicine/ER. Highest pay in the industry. Why work for less when you can work for the best? Call (601) 328-9623.

COASTAL EMERGENCY SERVICES, INC., a physician owned, professionally managed corporation which serves clients in a multi-state area, is seeking career emergency physicians (BC or BE in primary care specialties). For medical directorship and staff positions in Corinth, Mississippi, a 178-bed acute care facility. Attractive clinical compensation plus professional liability insurance procured on your behalf. Medical Directorship includes stipend plus health benefit package. To discuss your future with Coastal contact: 5885 Ridgeway Parkway, Dept. SF, Suite 113, Memphis, TN 38119; (800) 777-1301.

EXCELLENT TEXAS OPPORTUNITIES in Cardiology, ENT, Family Practice (5), General Surgery, Internal Medicine (2), Ob/Gyn (4), Oncology, Orthopedic Surgery (3), Pediatrics (2), Vascular Surgery, Industrial Medicine. Excellent quality of life, first year guarantee, etc. Reply with CV or call, Armando L. Frezza, Medical Support Services, 8806 Balcones Club Drive, Austin, TX 78750; (512) 331-4164.

120th Annual Session

June 15-19, 1988

Biloxi, Mississippi

Mark Your Calendar Now!

PHYSICIANS NEEDED

Physicians (especially specialists such as ophthalmologists, pediatricians, orthopedists, neurologists, etc.) interested in performing consultative evaluations (according to Social Security guidelines) should contact the Medical Relations Office. WATS 1-800-962-2230; Jackson, 922-6811; extensions 2276, 2330, and 2190.



DISABILITY DETERMINATION SERVICES
1-800-962-2230

CLASSIFIED

MEDICAL EQUIPMENT. Medical supplies, office equipment, waiting room furniture including: x-ray machine in excellent condition, exam tables, EKG machine, tele-printer, flame photometer, like-new typewriter, loveseat, end tables, lamps, chairs, many more items too numerous to mention. *Best offer.* Inquire Columbus, MS (601/328-0830).

VISION BLOOD INSTRUMENT. Abbot Labs. Model 1537. \$15,000. Still in warranty. Call (601) 362-1577.

FOR SALE. Flexible fiberoptic sigmoidoscope, Reichert Model SC-5, 65 cm. With light source and biopsy forceps. Contact Dennis Bradburn, M.D., 992-4084.

For information about the *Journal's* classified section or placement service, please contact the Managing Editor, P.O. Box 5229, Jackson, MS 39216.

Index to Advertisers

Association of Consulting Foresters	60	Postgraduate Medicine	49
Avanti	55	Premier Printing	56
Campbell Laboratories	61	Roche Laboratories	third, fourth covers
Disability Determination	13	Sampson, Howard & Ashcraft	62
DP Associates	65	Smith Kline and French	10A, 10C
Harrel Chevrolet-Oldsmobile	58	Trustmark	59
Eli Lilly and Company	6, 7	The Upjohn Co.	10B
Medical Assurance Co. of Miss.	8	U. S. Air Force	48
Mississippi Diagnostic Imaging Center	second cover	Jon Wimbish	4
Mississippi Emergency Association	66	Thomas Yates and Co.	14
MSMA Benefit Plan and Trust	12		
Northtown Printers	63		



**Recommended for
MSMA Members**

Disability Income Protection \$30,000*

Tax Free Each Year When You Are Disabled

- **Broad Disability Definitions.**
- **Residual Disability Benefits** paid when you continue to suffer income loss upon return to work.
- **Inflation Protection Rider** helps replace buying power of your benefit lost to inflation.
- **Choice of Benefit Period.**
- **Choice of Waiting Period.**
- **Underwritten by **INN****

...Founded in 1792, Insurance Company of North America is one of the oldest and strongest insurance companies in the United States.

* Based on \$2,500 Monthly Benefits

Insurance With Innovation

For Complete Information Contact:

Thomas Yates & Co.

GROUP INSURANCE ADMINISTRATORS

P.O. Box 5048 • Suite 365 Woodland Hills Building • 3000 Old Canton Road • Jackson, MS 39216

(601) 366-2406

See the improvement in the first week¹

- Sleep improvement in 74% of patients after first h.s. dose²
- Significantly faster relief—62% of total four-week improvement evident in first week versus 44% with amitriptyline alone¹
- Dramatic first-week reduction in somatic complaints²

% Reduction in Somatic Symptoms²

Vomiting	Nausea	Headache	Anorexia	Constipation
Reduced 90%	Reduced 86%	Reduced 72%	Reduced 62%	Reduced 60%

- Only 1/3 the dropout rate due to side effects of amitriptyline alone, although the incidence of side effects is similar¹

Caution patients about the combined effects of Limbitrol with alcohol or other CNS depressants and about activities requiring complete mental alertness, such as operating machinery or driving a car. In general, limit dosage to the lowest effective amount in elderly patients.

Copyright © 1987 by Roche Products Inc. All rights reserved.



Protect your decision.
Write "Do not substitute."

In moderate depression and anxiety

Limbitrol[®]

Each tablet contains 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt) ^{IV}

Limbitrol[®] DS

Each tablet contains 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt) ^{IV}

References: 1. Feighner JP, et al. *Psychopharmacology* 61:217-225, Mar 22, 1979. 2. Data on file, Hoffmann-La Roche Inc., Nutley, NJ.

Limbitrol[®] ^{IV}

Tranquilizer—Antidepressant

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of moderate to severe depression associated with moderate to severe anxiety.

Contraindications: Known hypersensitivity to benzodiazepines or tricyclic antidepressants. Do not use with monoamine oxidase (MAO) inhibitors or within 14 days following discontinuation of MAO inhibitors since hyperpyretic crises, severe convulsions and deaths have occurred with concomitant use, then initiate cautiously, gradually increasing dosage until optimal response is achieved. Contraindicated during acute recovery phase following myocardial infarction.

Warnings: Use with great care in patients with history of urinary retention or angle-closure glaucoma. Severe constipation may occur in patients taking tricyclic antidepressants and anticholinergic-type drugs. Closely supervise cardiovascular patients. (Arrhythmias, sinus tachycardia and prolongation of conduction time reported with use of tricyclic antidepressants, especially high doses. Myocardial infarction and stroke reported with use of this class of drugs.) Caution patients about possible combined effects with alcohol and other CNS depressants and against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving).

Usage in Pregnancy: Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Since physical and psychological dependence to chlordiazepoxide have been reported rarely, use caution in administering Limbitrol to addiction-prone individuals or those who might increase dosage, withdrawal symptoms following discontinuation of either component alone have been reported (nausea, headache and malaise for amitriptyline, symptoms [including convulsions] similar to those of barbiturate withdrawal for chlordiazepoxide).

Precautions: Use with caution in patients with a history of seizures, in hyperthyroid patients or those on thyroid medication, and in patients with impaired renal or hepatic function. Because of the possibility of suicide in depressed patients, do not permit easy access to large quantities in these patients. Periodic liver function tests and blood counts are recommended during prolonged treatment. Amitriptyline component may block action of guanethidine or similar antihypertensives. When tricyclic antidepressants are used concomitantly with cimetidine (Tagamet), clinically significant effects have been reported involving delayed elimination and increasing steady state concentrations of the tricyclic drugs. Concomitant use of Limbitrol with other psychotropic drugs has not been evaluated. Sedative effects may be additive. Discontinue several days before surgery. Limit concomitant administration of ECT to essential treatment. See Warnings for precautions about pregnancy. Limbitrol should not be taken during the nursing period. Not recommended in children under 12. In the elderly and debilitated, limit to smallest effective dosage to preclude ataxia, oversedation, confusion or anticholinergic effects.

Adverse Reactions: Most frequently reported are those associated with either component alone: drowsiness, dry mouth, constipation, blurred vision, dizziness and bloating. Less frequently occurring

reactions include vivid dreams, impotence, tremor, confusion and nasal congestion. Many depressive symptoms including anorexia, fatigue, weakness, restlessness and lethargy have been reported as side effects of both Limbitrol and amitriptyline. Granulocytopenia, jaundice and hepatic dysfunction have been observed rarely.

The following list includes adverse reactions not reported with Limbitrol but requiring consideration because they have been reported with one or both components or closely related drugs.

Cardiovascular: Hypotension, hypertension, tachycardia, palpitations, myocardial infarction, arrhythmias, heart block, stroke.

Psychiatric: Euphoria, apprehension, poor concentration, delusions, hallucinations, hypomania and increased or decreased libido.

Neurologic: Incoordination, ataxia, numbness, tingling and paresthesias of the extremities, extrapyramidal symptoms, syncope, changes in EEG patterns.

Anticholinergic: Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract.

Allergic: Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus.

Hematologic: Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia.

Gastrointestinal: Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, black tongue.

Endocrine: Testicular swelling and gynecomastia in the male, breast enlargement, galactorrhea and minor menstrual irregularities in the female, elevation and lowering of blood sugar levels, and syndrome of inappropriate ADH (antidiuretic hormone) secretion.

Other: Headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, jaundice, alopecia, parotid swelling.

Overdosage: Immediately hospitalize patient suspected of having taken an overdose. Treatment is symptomatic and supportive. IV administration of 1 to 3 mg physostigmine salicylate has been reported to reverse the symptoms of amitriptyline poisoning. See complete product information for manifestation and treatment.

Dosage: Individualize according to symptom severity and patient response. Reduce to smallest effective dosage when satisfactory response is obtained. Larger portion of daily dose may be taken at bedtime. Single h.s. dose may suffice for some patients. Lower dosages are recommended for the elderly. **Limbitrol DS (double strength) Tablets:** initial dosage of three or four tablets daily in divided doses, increased up to six tablets or decreased to two tablets daily as required. **Limbitrol Tablets:** initial dosage of three or four tablets daily in divided doses, for patients who do not tolerate higher doses.

How Supplied: **Double strength (DS) Tablets:** white, film-coated, each containing 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt), and **Tablets:** blue, film-coated, each containing 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt). Available in bottles of 100 and 500, Tel-E-Dose[®] packages of 100, Prescription Paks of 50.



ROCHE PRODUCTS INC.
Nutley, Puerto Rico 00701


The rewards of Limbitrol You're both smiling again!

See the improvement in the first week¹


In depressed and anxious patients, you can see the difference sooner—62% of total four-week improvement achieved in the first week with Limbitrol versus 44% with amitriptyline.¹

In moderate depression and anxiety

Limbitrol[®]

Each tablet contains 5 mg clordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt) 

Limbitrol[®] DS

Each tablet contains 10 mg clordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt) 

ROCHE

Please see summary of product information on adjacent page.

1988

**DOCTORS'
DAY
MARCH 30**

Your confidence moves us. Again.

This year, more Mississippi doctors insured with us than with any other firm. Your confidence moves us . . . in more ways than one.

Growth through stability. Since we wrote our first policy in November of 1977, Medical Assurance Company has experienced steady growth and our membership is constantly increasing. The reason that more and more physicians are turning to us is simple: They know that they are receiving the most cost effective coverage backed by a financially sound company.

At Medical Assurance Company, savings and financial strength are provided by a program of sound investments and underwriting guidelines. Our staff is made up of experienced insurance professionals. And all claims are

reviewed by a panel of medical experts, so you can rest assured that your needs are understood.

A new location. To house a larger staff and to provide even better service, we have moved back to the State Medical Association Building, this time occupying an entire floor.

For answers to any questions you might have regarding medical professional liability insurance, visit us in our new offices on Riverside Drive, or call us anytime.



Medical Assurance Company of Mississippi

Street Address: Suite 301

735 Riverside Dr., Jackson, MS

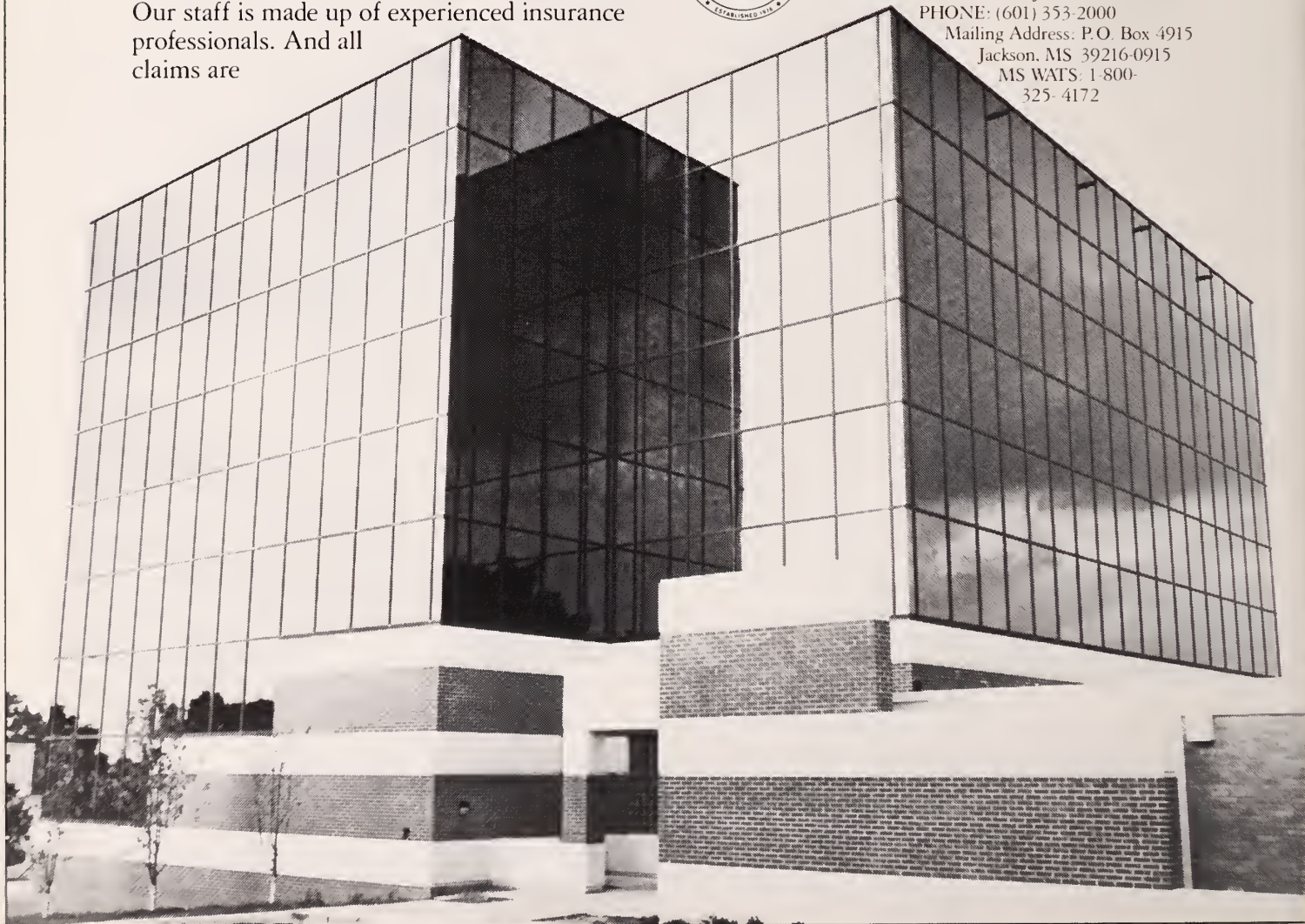
PHONE: (601) 353-2000

Mailing Address: P.O. Box 4915

Jackson, MS 39216-0915

MS WATS: 1-800-

325-4172



JOURNAL

OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION

MARCH 1988

VOLUME XXIX

NUMBER 3

SCIENTIFIC

Peripartum Cardiomyopathy: A Case Report

67

*Diane Kaye Beebe, M.D. and
Judith Gore Gearhart, M.D.*

The Use of Allografts in Anterior Cervical Interbody Fusion

71

*Rodney E. Frothingham, M.D. and
Alexandre Solomon, M.D.*

The Primary Care Physician's Role in Management of the Patient with Myelomeningocele

75

*Marilyn D. Graves, M.D., Glen R. Graves,
M.D., and Marcia Barron, Ed.S.*

SPECIAL ARTICLE

Final Report and Recommendations of Mississippi's Health Curriculum Committee

78

EDITOR

Myron W. Lockey, M.D.

EDITOR EMERITUS

W. Moncure Dabney, M.D.

ASSOCIATE EDITORS

Arthur A. Derrick, Jr., M.D.

Joseph E. Johnston, M.D.

MANAGING EDITOR

Patsy Silver

PUBLICATIONS COMMITTEE

Richard C. Miller, M.D.,

Chairman

George H. Martin, M.D.

William J. Gibson, M.D.

and the editors

THE ASSOCIATION

W. Lamar Weems, M.D.

President

David R. Steckler, M.D.

President-Elect

Don Q. Mitchell, M.D.

Secretary-Treasurer

James C. Waites, M.D.

Speaker

H. Vann Craig, M.D.

Vice Speaker

Charles L. Mathews

Executive Director

EDITORIALS

The Other Medical Profession

84

Coat of Many Colors

85

Joseph E. Johnston, M.D.

Physician Support Sought for School Health Curriculum

85

J. Edward Hill, M.D., Chairman

DEPARTMENTS

Letters

85

Comment

87

Organization News

89

Medico-Legal Brief

91

New Members

95

Personals

98

Placement Service

100

Copyright© 1988, Mississippi State Medical Association. The views expressed in this publication reflect the opinions of the authors and do not necessarily state the opinions or policies of the Mississippi State Medical Association.

THE JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION (ISSN 0026-6393) is owned and published monthly by the Mississippi State Medical Association, founded 1856, at 735 Riverside Drive, Jackson, Mississippi 39202. Subscription rate, \$25.00 per annum; \$35.00 per annum for foreign subscriptions; \$2.25 per copy, as available. Advertising rates furnished on request. Printed by The Ovid Bell Press, Inc., Fulton, Missouri. Second-class postage paid at Jackson, Mississippi, and at additional mailing offices. POSTMASTER: Send address changes to Mississippi State Medical Association, P.O. Box 5229, Jackson, Mississippi 39216.

You don't have time to waste on medical writing that is cluttered with complicated statistics and data. Depend on Postgraduate Medicine to provide you with clearly written, well-illustrated articles on matters of practical importance in your daily life.

You don't have time to waste on medical writing that is cluttered with complicated statistics and data. Depend on *Postgraduate Medicine* to provide you with clearly written, well-illustrated articles on matters of practical importance in your daily life.

NEWSLETTER

March 1988

Dear Doctor:

Several meetings have been scheduled for upcoming months. MSMA members may wish to make notations on their calendars now for these events:

September 14 - AMPAC/MMPAC seminar. A daylong workshop which has been rated "excellent" by previous registrants. Enrollment will be limited to 50 physicians and spouses. Watch for registration forms to be included in a future issue of the "Blue Sheet."

May 13-14 - "New Directions in Diabetes Management." Sponsored by the American Diabetes Association. To be held at the Radisson Walthall Hotel in Jackson. For information, call 981-9511.

April 21-24 - "Speakers Training/Health Reporting Conference." For physician spokespersons, novice or experienced. New Orleans, Hyatt Regency Superdome. For information, call 312-645-5102.

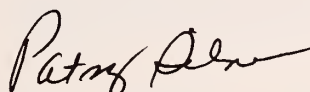
April 14-15 - "Physicians Cholesterol Education Program." Co-sponsored by American Heart Association - Mississippi Affiliate and the University of Mississippi School of Medicine. Radisson Walthall Hotel in Jackson. For information, call 981-4721.

April 7-9 - "Conference on Physician Competence: Whose Responsibility." Co-sponsored by AMA, AHA, and Association of American Medical Colleges. Houston, Texas - The Warwick. For information, call 312-645-5000.

April 9 - "Ninth Annual Spring Sonic Symposium." - Sponsored by Miss. Ultrasound Society. Natchez, Mississippi - Eola Hotel. For information call 354-4327.

And don't forget MSMA's 120th Annual Session, set for June 15-19 at the Royal d'Iberville Hotel in Biloxi. Preliminary plans are outlined in this issue of the Journal. Watch for more details, to be distributed soon.

Sincerely,



Patsy Silver
Managing Editor

What Every Physician's Spouse Should Know

A series of booklets on topics of special interest to medical families published by the American Medical Association Auxiliary



Professional Liability

- Scope of problem
- Legal process
- Coping

Impairment

- Causes
- Impact on family
- Getting help

Survival Tips for Resident Physician/Medical Student Spouses

- Marriage in the training years
- Stress
- Finances

Marriage

- Who players are
- Special concerns
- Stages of medical career

Retirement and Estate Planning

- Making retirement years fulfilling
- Providing for the family's future

MAIL ORDER FORM TO:
American Medical Association Auxiliary, Inc.
535 N. Dearborn St., Chicago, IL 60610

Please send me the following publications in the series on *What Every Physician's Spouse Should Know*:

- # of copies
- Impairment
 - Professional Liability
 - Survival Tips for Resident Physician/Medical Student Spouses
 - Marriage
 - Retirement and Estate Planning

(AVAILABLE FEB. 1, 1987)

Each booklet is \$3 per copy for AMA Auxiliary members and \$5 per copy for non-members.

Enclosed is my check in the amount of \$_____ made payable to the AMA Auxiliary. Check must accompany order form.

NAME _____

ADDRESS _____

CITY/STATE/ZIP _____

TELEPHONE (____) _____

CARAFATE®

(sucralfate)

BRIEF SUMMARY

CONTRAINDICATIONS

There are no known contraindications to the use of sucralfate.

PRECAUTIONS

Duodenal ulcer is a chronic, recurrent disease. While short-term treatment with sucralfate can result in complete healing of the ulcer, a successful course of treatment with sucralfate should not be expected to alter the post-healing frequency or severity of duodenal ulceration.

Drug Interactions: Animal studies have shown that the simultaneous administration of CARAFATE with tetracycline, phenytoin, or cimetidine will result in a statistically significant reduction in the bioavailability of these agents. This interaction appears to be nonsystemic in origin, presumably resulting from these agents being bound by CARAFATE in the gastrointestinal tract. The bioavailability of these agents may be restored simply by separating the administration of these agents from that of CARAFATE by two hours. The clinical significance of these animal studies is yet to be defined.

Carcinogenesis, Mutagenesis, Impairment of Fertility: No evidence of drug-related tumorigenicity was found in chronic oral toxicity studies of 24 months' duration conducted in mice and rats at doses up to 1 gm/kg (12 times the human dose). A reproduction study in rats at doses up to 38 times the human dose did not reveal any indication of fertility impairment. Mutagenicity studies have not been conducted.

Pregnancy: Pregnancy Category B. Teratogenicity studies have been performed in mice, rats, and rabbits at doses up to 50 times the human dose and have revealed no evidence of harm to the fetus due to sucralfate. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

Nursing Mothers: It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when sucralfate is administered to a nursing woman.

Pediatric Use: Safety and effectiveness in children have not been established.

ADVERSE REACTIONS

Adverse reactions to sucralfate in clinical trials were minor and only rarely led to discontinuation of the drug. In studies involving over 2,500 patients, adverse effects were reported in 121 (4.7%). Constipation was the most frequent complaint (2.2%). Other adverse effects, reported in no more than one of every 350 patients, were diarrhea, nausea, gastric discomfort, indigestion, dry mouth, rash, pruritus, back pain, dizziness, sleepiness, and vertigo.

DOSAGE AND ADMINISTRATION

The recommended adult oral dosage for duodenal ulcer is 1 gm four times a day on an empty stomach.

Antacids may be prescribed as needed for relief of pain but should not be taken within one-half hour before or after sucralfate.

While healing with sucralfate may occur during the first week or two, treatment should be continued for 4 to 8 weeks unless healing has been demonstrated by x-ray or endoscopic examination.

HOW SUPPLIED

CARAFATE (sucralfate) 1-gm pink tablets are supplied in bottles of 100 and in Unit Dose Identification Paks of 100. The tablets are embossed with MARION/1712. Issued 3/84

References:

- Grossman MI: *Scand J Gastroenterol* 58 (suppl 15):7-16, 1980.
- Marks IN, in Hellemans J, Vantrappen G (eds): *Gastrointestinal Tract Disorders in the Elderly*. Edinburgh, Churchill Livingstone, 70-81, 1984.
- Krentz K, Jablonowski H, in Hellemans J, Vantrappen G (eds): *Gastrointestinal Tract Disorders in the Elderly*. Edinburgh, Churchill Livingstone, 62-69, 1984.

Another patient benefit product from

MARION
PHARMACEUTICAL DIVISION
LABORATORIES, INC.
KANSAS CITY, MO 64137

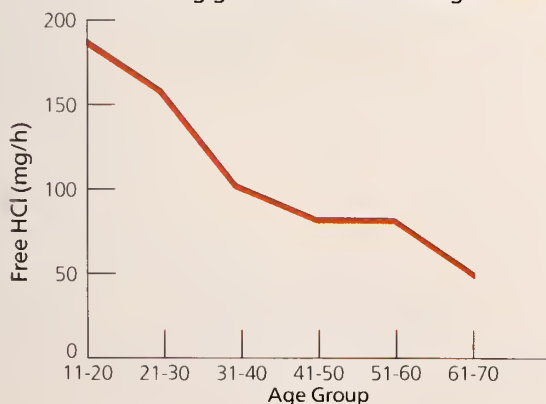
Specialized ulcer therapy

When advancing age signals reduced acid secretion



If your duodenal ulcer patient is over 55, decreased mucosal resistance is more likely to cause an ulcer than hypersecretion of acid-pepsin.¹ A tendency toward lower acid secretion with advancing age has been shown.^{2,3}

Declining gastric secretion and age³



CARAFATE® (sucralfate/Marion) makes sense as initial ulcer therapy for the elderly. Carafate provides ulcer

healing rates comparable to H₂ antagonists without the risk of systemic side effects or drug interactions—an important benefit for older patients.

The unique, nonsystemic action of Carafate enhances the body's own ulcer healing ability, strengthening the mucosal structure as it protects damaged tissue from further injury.

When advancing age signals reduced acid secretion, choose the specialized ulcer therapy of safe, nonsystemic Carafate.

Nothing works like


CARAFATE®
sucralfate/Marion

Please see adjoining page for references and brief summary of prescribing information.

1595H7



First hundreds...



Then thousands...

Soon more than a million.

Soon more than a million insulin users will be taking Humulin.


And no wonder. Humulin is identical to the insulin produced by the human pancreas—except that it is made by rDNA technology.

Humulin is not derived from animal pancreases. So it contains none of the animal-source pancreatic impurities that may contribute to insulin allergies or immunogenicity.

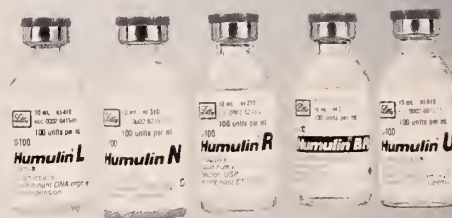
The clinical significance of insulin antibodies in the complications of diabetes is uncertain at this time. However, high antibody titers have been shown to decrease the small amounts of endogenous insulin secretion some insulin users still have. The lower immunogenicity of Humulin has been shown to result in lower insulin antibody titers; thus, Humulin may help to prolong endogenous insulin production in some patients.

Any change of insulin should be made cautiously and only under medical supervision. Changes in refinement, purity, strength, brand (manufacturer), type (regular, NPH, Lente®, etc), species/source (beef, pork, beef-pork, or human), and/or method of manufacture (recombinant DNA versus animal-source insulin) may result in the need for a change in dosage.

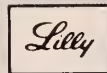
DIET...EXERCISE...

Humulin® 
human insulin
(recombinant DNA origin)

For your insulin-using patients



Lilly Leadership
IN DIABETES CARE



Eli Lilly and Company
Indianapolis, Indiana
46285

© 1987, ELI LILLY AND COMPANY

HI-2907-B

849313

TELL YOUR PATIENTS THEIR CHOLESTEROL NUMBER... BEFORE THEY ASK.

Reducing high blood cholesterol reduces the risk of heart disease. That's why we're telling Americans—through a national public service advertising campaign—to know their cholesterol number. Your patients may soon be asking you for their number and what it means.

And when they do, we can help. The National Cholesterol Education Program, administered by the National Heart, Lung, and Blood Institute, has developed adult treatment guidelines to help you identify high-risk patients and use the appropriate diet and/or drug therapy for those with elevated cholesterol levels.

Help your patients reduce their risk of heart disease. For a free copy of the *Report of the Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults*, complete the form below.

Name _____
Specialty _____
Address _____
City _____ State _____ Zip _____

Mail to: Cholesterol Adult Treatment Guidelines
National Cholesterol Education Program
National Heart, Lung, and Blood Institute
C-200-GA
Bethesda, MD 20892



NATIONAL CHOLESTEROL EDUCATION PROGRAM
NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

National Institutes of Health • Public Health Service • U.S. Department of Health and Human Services

PHYSICIANS, SCHEDULE SOME TIME FOR YOUR COUNTRY.

Many physicians would like to devote some time to their country in a local Army Reserve unit. We know that making a weekend commitment can be difficult for most physicians. So it is practical for the Army Reserve units to be flexible about time. It's worth discussing.

Incidentally, in addition to satisfying your own desire to serve your country, there are exceptional opportunities to do something totally different from a day-to-day routine. Opportunities to study new areas of medicine, meet new people in your specialty, and be a part of one of the world's most advanced medical teams.

Discuss the opportunities with our Army Medical Personnel Counselor.

FOR SURGEONS LOOKING FOR A CHALLENGE.

Your challenge could be the Army Reserve unit near you. It's a unit that requires the services of surgeons.

You may wish to explore the challenge of teaching in a major medical center. You may wish to explore the special challenges of your specialty in triage. Certainly you'll be confronted by challenges very different from your daily routine.

You'll also have an opportunity to participate in a number of programs in which you'll be able to exchange views and information with other surgeons from all over the country.

The Army Reserve understands the time demands on a busy physician, so you can count on us to be totally flexible in making time for you to share your specialty with your country. We'll arrange your training program to work with your practice.

To find out about the benefits of serving with a nearby Army Reserve unit, we recommend you call our Army Medical Personnel Counselor.

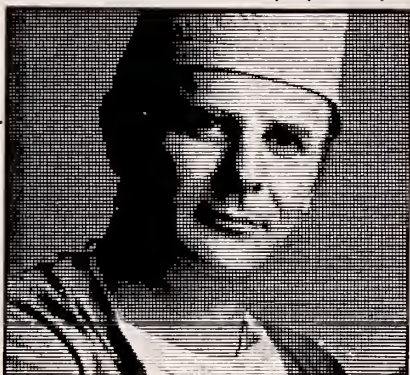
PHYSICIANS, THERE ARE TWO KINDS OF FLEXIBILITY IN THE ARMY RESERVE WE THINK YOU'LL LIKE.

One, time. We know how tough it is for a busy physician to make weekend time commitments. So we offer flexible training programs that allow a physician to share some time with his or her country. We arrange a schedule to suit your requirements.

Two, the opportunity to explore other phases of medicine, to add a different kind of knowledge—the challenge of military health care. It's a flexibility which could prove to be both stimulating and rewarding, with the opportunity to participate in a variety of programs that can put you in contact with medical leaders from all over the country.

See how flexible we can be, call our Army Medical Personnel Counselor.

**ARMY RESERVE.
BE ALL YOU CAN BE.**



HERE'S ONE DOCTOR WHO WON'T PAY HIS MALPRACTICE PREMIUMS THIS YEAR.

The Army covers his premiums. Since he's an Army Physician, there are a lot of worries associated with private practice that he won't have to contend with. Like excessive paperwork, and the overhead costs incurred in running a private practice.

What he will get is a highly challenging, highly rewarding experience. The Army offers varied assignments, chances to specialize, or further your education, and to work with a team of dedicated health care professionals. Plus a generous benefits package.

If you're interested in practicing high quality health care with a minimum of administrative burdens, examine Army medicine. Talk to your local Army Medical Department Counselor for more information.

**ARMY MEDICINE.
BE ALL YOU CAN BE.**

MAJOR OPPORTUNITIES FOR HEALTH PROFESSIONALS.

Army Medicine
Mid-Memphis Tower Bldg.
Suite 702
1407 Union Ave.
Memphis, TN 38104
Call collect: (901) 521-2855

Army Reserve Medicine
255 West Oxmoor Rd.
Room R-105
Birmingham, AL 35209
Call collect: (205) 942-6570



DATELINE

Bicycle Injuries to Children
Are Unacceptable, Preventable

Chicago, IL - Bicycle injuries account for about 600 deaths and 300,000 emergency room visits each year for children and adolescents

in the U.S., says an accident prevention expert in the newsletter of the American Academy of Pediatrics. Noting that bicycle accidents are a leading cause of head injury in these youngsters, he urges pediatricians to promote educational programs, particularly increased use of bicycle helmets.

AMA Membership
Exceeds 1987 Goal

Chicago, IL - AMA membership showed an increase in all categories over 1986 figures. Year-end dues paying membership is 10,927

members (4.5%) above the 1986 total. Regular membership totaled 178,376 - up 8,235; house staff totaled 38,760 - up 1,941; and medical students totaled 36,587 - up 751. The AMA achieved 104.1% of its 1987 membership goal of 243,800, compared with 103.1% of its 1986 goal of 235,600.

Drug Interaction
Database Available

Chicago, IL - The nation's first and only on-line, generic ingredient-based drug interaction database is available through

AMA/NET. The Medicom Drug Interaction Database, endorsed by the American Pharmaceutical Association, identifies potential drug interactions and contraindications and will accept either the trade or generic drug name. The system enables physicians to quickly evaluate drug therapy programs.

Dietary Fiber Supplement
Lowers Cholesterol Levels

Chicago, IL - An over-the-counter dietary fiber supplement may be as effective as some often prescribed drugs for lowering

cholesterol, says a report in the February Archives of Internal Medicine. The study involved 26 men with mild to moderately elevated serum cholesterol levels. After eight weeks, the double-blind, placebo-controlled study found use of psyllium hydrophilic mucilloid helped reduce cholesterol levels.

Vapor from Laser-Treated
Warts Can Contain Virus

Chicago, IL - Medical personnel should take infection-control precautions during laser treatment of patients with

warts because the laser vapor may contain intact DNA from the wart-causing virus, says a report in the February 26 JAMA. Potential infectivity is unclear, but the report urges personnel to wear protective clothing and equipment, and carefully use vapor-collecting vacuum systems.



“When I realized my chances of becoming disabled by age 65 were *three times greater* than the chances of death . . .

I compared disability insurance plans. And I decided that my MSMA-endorsed disability insurance plan

SERVES ME BEST!

It’s not group insurance, but an individually-owned policy which is *non-cancellable* and *guaranteed renewable*.”

If you’re a member of the Mississippi State Medical Association you may be eligible for this outstanding professional disability plan at *discounted premiums*.

- Non-cancellable, guaranteed renewable
- Medical specialty protection
- Presumptive loss provision
- Indexing of prior earnings
- Waiver of premium
- Cost of living rider
- Future disability insurance option
- Lifetime accident and sickness rider
- Total and residual disability protection

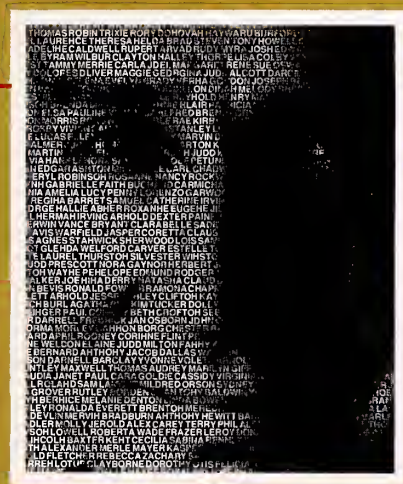
Offered by Paul Revere Insurance Company to MSMA members through its exclusive representatives, Professional Disability Specialists.

Jon B. Wimbish, Disability Specialist

1501 Lakeland Drive, Suite 200 Jackson, MS 39216 Telephone 362-9800

EXPECT YOUR NEXT PATIENT ON INDERAL[®] LA TO...

(PROPRANOLOL HCl)
LONG ACTING CAPSULES 60, 80, 120, 160 mg



FINNIGEL ARNOLD
 ARCY GRIFFITH ALBY
 AISY TRINA NADIA
 NGELA WILSON HIL
 LLIE ORLANDO BAL
 ENE SUE OSWALD C
 LENA EVELYN BRA
 EBBY TURNER PAGE
 FFREY BREWSTER
 OBLERAE KIRBY IRE
 ROOKE LUCAS ELLI
 ECIL SUZANNA THOM
 AMERON HASKEL THOM
 ANCY ROCKWELL FREL
 ANIA AMELIA LUCY PEN
 PENCER BURGESS NATI
 ARFIELD LIONEL TYSON SEF
 AUL ROBERT ED CHARLIE
 ILVESTER WINSTON BUCK
 RISTEN BURTON WAYNE PE
 ART YOLANDA HARDEN MUI
 AY GERALD WHITNEY REDFO
 INGER PAUL CONROY BETH C
 RADWELL GENE HOBART CH
 IRLIL SELMA MASON ROSAM
 NTHONY TOM JACOB DALLAS
 ARWING GWENDOLEN BERKEL
 EROME HUBERT MABEL MILES
 GAN TONY BALDWIN YVETTER R
 ESLEY RONALDA EVERETT BF
 EATH NOLAN ARVIN CHARLOTT
 HASE STUART DEWEY DREW CA
 ERLE MAYER KASPER COLETT
 OYD AMY DARREN LOTUS CLAY
 OLLY JOHN MARC RYLAN COLL
 ERA FREIDA LUIS TOM DAVIS KARE
 ARISSA LEAH MURIEL LOGAN
 EIGH NED TOM AMANDA THOM
 BBOT WENDY ELVIS HAGEN PE
 ENJAMIN KLAUS FAYE JODY VA
 AL COLM ANDREW NYDIA RAY
 ARVEY ROBERT KRISTEN JIM
 ASEY ORLANDO PIA WARREN
 HERESA JOE ANTHONY WEBB
 ERLIN GARNER ALLAN ALICE
 AYNOR TRINA LLOYD ARNOLD
 AYWARD WARD REED JASON
 ISA HILLEL ATWOOD JOY BUR
 ICTORIA JOHN TONIA FIONA
 AD FORD DORA BROOKE PAYNE
 ORRIS ELVIRA EL ROY WARTON
 ALKER BRAD REVIN SYDNEY
 OYLECHERIE SUE JOEL TILLIER
 ARGARET MAGGIE MARVIN GER
 HRISTOPHER BRENDA WALTER G
 ERNICE CHRISTI VERONICA BILL
 AY OLIVER BLANCHE DARCIE LESL
 AULINE MILLARD RODNEY GRACE
 OBERT KRISTEN BURTON CAMPBELL
 REND CARLOS MARIANNE SANDER
 ATHANIA JUDD GARFIELD HENRY
 RYAN RANDOLPH VIVIAN LEWIS
 LINT BOWIE ALEXANDRA CURT HASKEL
 OSEMARY ROLAND AUBIN MARGA
 RADSHAW RILEY JOE BERNIE PHIL
 UNTLEY DAVID ALISON THELMA
 NNETTE PRESCOTT LENORE JACK
 LEXIS LINDA ORSON THADDEUS
 UIS CARY FRED LEE LAUREL GWENDOLEN
 INSTON JOLIE SIGMUND WILTON
 ACHEL JEROLD JUDITH HOGAN
 TEWART MERLE BARLOW LAWSON
 YRONE CLIFTON NORMAN BURNE
 IM KIM NINA BENNETT SEBASTIAN
 ULLIVAN BUCKLEY BRANDON MARSHA
 ONI ARTHUR LINCOLN MASON AL
 ICK ALEXANDER GANNON DREW OSBORN
 OLDIE SHARON MILTON MARC BORG
 AUL GUNTHER FELIX RALPH NATHANIEL
 OLLY LAVERNE LEIGH SAL DOMINIC
 UTLEY GARLAND VAL DIANE BRUCE
 YNNE ELVIS JUDD FLETCHER FELICIA
 AYE LEIGH ELMO LOGAN BEAMAN
 RNOLD BERNARD JOHN JOSEPH JUDD
 ERLIN BRUNO ANDREA DRY DEN MARTINA

ON

...like the more than one million patients who have received **INDERAL® LA**.

In a recent survey, 4,120 participating physicians gave us their views¹ on **INDERAL LA** in the treatment of hypertension, angina and migraine.

INDERAL LA is their preferred beta blocker

...of the nearly three out of four physicians responding to the questionnaire, an impressive 97% rated **INDERAL LA** good to excellent for overall performance. Virtually all cited efficacy, tolerability, long-term cardiovascular protection and once-daily convenience as important factors in their choosing to prescribe **INDERAL LA**.

INDERAL LA promotes patient compliance

...Virtually every responding physician rated patient satisfaction with **INDERAL LA** to be as good as, or better than, other beta blockers.

Like conventional **INDERAL** Tablets, **INDERAL LA** should not be used in the presence of congestive heart failure, sinus bradycardia, cardiogenic shock, heart block greater than first degree and bronchial asthma.

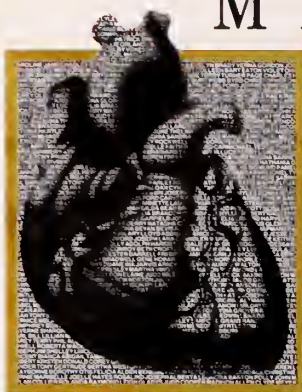
ONCE-DAILY
INDERAL® LA
 (PROPRANOLOL HCl)
 LONG ACTING CAPSULES
 60, 80, 120, 160 mg

The one you know best keeps looking better

Please see next page for brief summary of prescribing information.

ROBERT KRISTEN ARNOLD
 MARCUS RHODA JEREMY
 LIAN FLOYDELLIOTT HAR
 MYRA JOSH EDWARD DA
 AMMY MERRIE CARLA JO
 LEY IRIS STEPHANIE CHA
 A JESSICA BERNARD MA
 E BLAIR PATRICIA MIL
 ANNON MORRIS BOND N
 AHAM ELEANORE GIN
 MORE CLAY PEARCE C
 NICOLE PETUNIA HA
 LEE CHERYL ROBINS
 RVIN HUNTER NEVIN
 TTL AND COLEMAN C
 ER PAINE JANE SH
 AWLEY KATHERINE
 E IRMA MYLES JULI
 INETTE LAUREL TH
 RANDALL PHYLLIS
 RION JULIUS GLENN
 JESSE ASHLEY CLIF
 ANCHE ROBIN JACQ
 RK NOAH STEWART
 ORINNE FLINT PRESL
 RON NORTON JULIE
 SHIRLEY HARPER PE
 OLDIE CASSIDY VIRGI
 LYDIA GROVER RUTL
 SIBYL NOEL HUMPHR
 L BILL LILLIAN MARLE
 ADE FRAZER LEROY DO
 SMEREDITH ALEXAND
 ESMOND TONY HILAR
 ERTA LEONORA BART
 ENNIS CULLEN TABIT
 RENDAN GUNTHERE
 MARIO JAYNE MELIS
 SPER VITO NICHOLA
 Y JONATHAN SALLY
 ON SEAN WALDEN RO
 RT DIANE JENNIFER LE
 LLEEN DWIGHT MITCH
 INGRID CHANNING LIN
 ANSON ANDREW GALL
 ER ROXANNE ASHBY HAR
 A TRIXIE RORY BAYARD CH
 JOSEPH PAGE JULIE REX REY
 LEONA RUDY MARCUS SLOAN E
 RA DONNA CRAIG ANNE ELMER F
 HAM ADELINE HALLEY MILFORD DE
 ON PRISCILLA WILSON RUPERT HAR
 ATH STEVEN BRONSON JEAN PETER DIA
 NE LORNA ROBERT A NOBLE TOM SABIN
 T MIA BARTLETT BEAUDINAH JIM FRITZ D
 JNE CECILIA TAMARA BEN ROSABELLE JU
 LE SIMPSON BERNARD ERROL CORETTA
 VERETT MARGO LENA LORENZO CLIFF R
 N MARTIN THOMAS TONY COLEMAN LUCI
 DEN REBECCA COURTNEY NICOLE BREWS
 ER RHONDA TURNER MADELINE ELLEN MO
 OWLER JANET TONY THOMAS ROBERT SO
 T ROBIN HARDEN BRETT NEIL BORDEN OT
 T WATSON GEORGIA BARCLAY ODESSA
 ADWICK APRIL TODD ARDEN LAUR
 A MABEL SHERWIN PATIDA GINA
 ARD ARNOLD HILLIARD SILVES
 ORA DONAHUE EGAN MURRA
 DAMDEN EDNA MILES AL BEP
 RUSSEL AUDREY ELI DEWE
 NOLD TONY WILFRED CL
 DAM TYSON LARISSA A
 ON LIBBY OSCAR PHY
 OYD PHOEBE ARCH
 HIS FRANKLIN LOT
 M RENEE CHA
 AN ZELDA
 AS MEGA
 Y CRY
 SHEE

feel like a
MILLION



ONCE-DAILY
INDERAL[®] LA
(PROPRANOLOL HCl)
LONG ACTING
CAPSULES 60, 80, 120, 160 mg

The one you know best
keeps looking better



BRIEF SUMMARY (FOR FULL PRESCRIBING INFORMATION, SEE PACKAGE CIRCULAR.)

INDERAL[®] LA brand of propranolol hydrochloride (Long Acting Capsules)

DESCRIPTION. INDERAL LA is formulated to provide a sustained release of propranolol hydrochloride. INDERAL LA is available as 60 mg, 80 mg, 120 mg, and 160 mg capsules.

CLINICAL PHARMACOLOGY. INDERAL is a nonselective, beta-adrenergic receptor-blocking agent possessing no other autonomic nervous system activity. It specifically competes with beta-adrenergic receptor-stimulating agents for available receptor sites. When access to beta-receptor sites is blocked by INDERAL, the chronotropic, inotropic, and vasodilator responses to beta-adrenergic stimulation are decreased proportionately.

INDERAL LA Capsules (60, 80, 120, and 160 mg) release propranolol HCl at a controlled and predictable rate. Peak blood levels following dosing with INDERAL LA occur at about 6 hours and the apparent plasma half-life is about 10 hours. When measured at steady state over a 24-hour period the areas under the propranolol plasma concentration-time curve (AUCs) for the capsules are approximately 60% to 65% of the AUCs for a comparable divided daily dose of INDERAL Tablets. The lower AUCs for the capsules are due to greater hepatic metabolism of propranolol, resulting from the slower rate of absorption of propranolol. Over a twenty-four (24) hour period, blood levels are fairly constant for about twelve (12) hours then decline exponentially.

INDERAL LA should not be considered a simple mg-for-mg substitute for conventional propranolol and the blood levels achieved do not match (are lower than) those of two to four times daily dosing with the same dose. When changing to INDERAL LA from conventional propranolol, a possible need for retitration upwards should be considered especially to maintain effectiveness at the end of the dosing interval. In most clinical settings, however, such as hypertension or angina where there is little correlation between plasma levels and clinical effect, INDERAL LA has been therapeutically equivalent to the same mg dose of conventional INDERAL as assessed by 24-hour effects on blood pressure and on 24-hour exercise responses of heart rate, systolic pressure, and rate pressure product. INDERAL LA can provide effective beta blockade for a 24-hour period.

INDICATIONS AND USAGE. Hypertension: INDERAL LA is indicated in the management of hypertension; it may be used alone or used in combination with other antihypertensive agents, particularly a thiazide diuretic. INDERAL LA is not indicated in the management of hypertensive emergencies.

Angina Pectoris Due to Coronary Atherosclerosis: INDERAL LA is indicated for the long-term management of patients with angina pectoris.

Migraine: INDERAL LA is indicated for the prophylaxis of common migraine headache. The efficacy of propranolol in the treatment of a migraine attack that has started has not been established and propranolol is not indicated for such use.

Hypertrophic Subaortic Stenosis: INDERAL LA is useful in the management of hypertrophic subaortic stenosis, especially for treatment of exertional or other stress-induced angina, palpitations, and syncope. INDERAL LA also improves exercise performance. The effectiveness of propranolol hydrochloride in this disease appears to be due to a reduction of the elevated outflow pressure gradient which is exacerbated by beta-receptor stimulation. Clinical improvement may be temporary.

CONTRAINDICATIONS. INDERAL is contraindicated in 1) cardiogenic shock; 2) sinus bradycardia and greater than first-degree block; 3) bronchial asthma; 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with INDERAL.

WARNINGS. CARDIAC FAILURE: Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or INDERAL should be discontinued (gradually, if possible).

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following abrupt discontinuance of INDERAL therapy. Therefore, when discontinuance of INDERAL is planned, the dosage should be gradually reduced over at least a few weeks, and the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If INDERAL therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute INDERAL therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

Nonallergic Bronchospasm (eg, chronic bronchitis, emphysema)—PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD IN GENERAL NOT RECEIVE BETA BLOCKERS. INDERAL should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

MAJOR SURGERY: The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

INDERAL (propranolol HCl), like other beta blockers, is a competitive inhibitor of beta-receptor agonists and its effects can be reversed by administration of such agents, eg, dobutamine or isoproterenol. However, such patients may be subject to protracted severe hypotension. Difficulty in starting and maintaining the heartbeat has also been reported with beta blockers.

DIABETES AND HYPOGLYCEMIA: Beta blockers should be used with caution in diabetic patients if a beta-blocking agent is required. Beta blockers may mask tachycardia occurring with hypoglycemia, but other manifestations such as dizziness and sweating may not be significantly affected. Following insulin-induced hypoglycemia, propranolol may cause a delay in the recovery of blood glucose to normal levels.

THYROTOXICOSIS: Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol may change thyroid function tests, increasing T_4 and reverse T_3 , and decreasing T_3 .

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

PRECAUTIONS. GENERAL: Propranolol should be used with caution in patients with impaired hepatic or renal function. INDERAL (propranolol HCl) is not indicated for the treatment of hypertensive emergencies.

Beta-adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be told that INDERAL may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

CLINICAL LABORATORY TESTS: Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

DRUG INTERACTIONS: Patients receiving catecholamine-depleting drugs such as reserpine should be closely observed if INDERAL (propranolol HCl) is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension.

Caution should be exercised when patients receiving a beta blocker are administered a calcium-channel-blocking drug, especially intravenous verapamil, for both agents may depress myocardial contractility or atrioventricular conduction. On rare occasions, the concomitant intravenous use of a beta blocker and verapamil has resulted in serious adverse reactions, especially in patients with severe cardiomyopathy, congestive heart failure, or recent myocardial infarction.

Aluminum hydroxide gel greatly reduces intestinal absorption of propranolol.

Ethanol slows the rate of absorption of propranolol.

Phenytoin, phenobarbital, and rifampin accelerate propranolol clearance.

Chlorpromazine, when used concomitantly with propranolol, results in increased plasma levels of both drugs.

Anipyrine and lidocaine have reduced clearance when used concomitantly with propranolol.

Thyroxine may result in a lower than expected T_3 concentration when used concomitantly with propranolol.

Cimetidine decreases the hepatic metabolism of propranolol, delaying elimination and increasing blood levels.

Theophylline clearance is reduced when used concomitantly with propranolol.

CARCINOGENESIS, MUTAGENESIS, IMPAIRMENT OF FERTILITY: Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

PREGNANCY: Pregnancy Category C. INDERAL has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximum recommended human dose.

There are no adequate and well-controlled studies in pregnant women. INDERAL should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

NURSING MOTHERS: INDERAL is excreted in human milk. Caution should be exercised when INDERAL is administered to a nursing woman.

PEDIATRIC USE: Safety and effectiveness in children have not been established.

ADVERSE REACTIONS. Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

Cardiovascular: Bradycardia; congestive heart failure; intensification of AV block; hypotension; parosmia of hands; thrombocytopenic purpura; arterial insufficiency, usually of the Raynaud type.

Central Nervous System: Light-headedness; mental depression manifested by insomnia, lassitude, weakness, fatigue; reversible mental depression progressing to cataplexy; visual disturbances; hallucinations; vivid dreams; an acute reversible syndrome characterized by disorientation for time and place, short-term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics. For immediate formulations, fatigue, lethargy, and vivid dreams appear dose related.

Gastrointestinal: Nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis.

Allergic: Pharyngitis and agranulocytosis, erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress.

Respiratory: Bronchospasm.

Hematologic: Agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura.

Auto-immune: In extremely rare instances, systemic lupus erythematosus has been reported.

Miscellaneous: Alopecia, LE-like reactions, psoriasisiform rashes, dry eyes, male impotence, and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin, serous membranes and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.

DOSAGE AND ADMINISTRATION. INDERAL LA provides propranolol hydrochloride in a sustained-release capsule for administration once daily. If patients are switched from INDERAL Tablets to INDERAL LA Capsules, care should be taken to assure that the desired therapeutic effect is maintained. INDERAL LA should not be considered a simple mg-for-mg substitute for INDERAL. INDERAL LA has different kinetics and produces lower blood levels. Retitration may be necessary, especially to maintain effectiveness at the end of the 24-hour dosing interval.

HYPERTENSION—Dosage must be individualized. The usual initial dosage is 80 mg INDERAL LA once daily, whether used alone or added to a diuretic. The dosage may be increased to 120 mg once daily or higher until adequate blood pressure control is achieved. The usual maintenance dosage is 120 to 160 mg once daily. In some instances a dosage of 640 mg may be required. The time needed for full hypertensive response to a given dosage is variable and may range from a few days to several weeks.

ANGINA PECTORIS—Dosage must be individualized. Starting with 80 mg INDERAL LA once daily, dosage should be gradually increased at three- to seven-day intervals until optimal response is obtained. Although individual patients may respond at any dosage level, the average optimal dosage appears to be 160 mg once daily. In angina pectoris, the value and safety of dosage exceeding 320 mg per day have not been established.

If treatment is to be discontinued, reduce dosage gradually over a period of a few weeks (see WARNINGS).

MIGRAINE—Dosage must be individualized. The initial oral dose is 80 mg INDERAL LA once daily. The usual effective dose range is 160-240 mg once daily. The dosage may be increased gradually to achieve optimal migraine prophylaxis. If a satisfactory response is not obtained within four to six weeks after reaching the maximal dose, INDERAL LA therapy should be discontinued. It may be advisable to withdraw the drug gradually over a period of several weeks.

HYPERTROPHIC SUBAORTIC STENOSIS—80-160 mg INDERAL LA once daily.

PEDIATRIC DOSAGE—At this time the data on the use of the drug in this age group are too limited to permit adequate directions for use.

*The appearance of these capsules is a registered trademark of Ayerst Laboratories.

Reference:

1. Data on file, Ayerst Laboratories.

D7295/188

**WYETH
AYERST**
PHILADELPHIA, PA 19101

© 1988, Wyeth-Ayerst Laboratories.

ORIGINAL PAPERS

Peripartum Cardiomyopathy: A Case Report

DIANE KAYE BEEBE, M.D.

JUDITH GORE GEARHART, M.D.

Jackson, Mississippi

PERIPARTUM CARDIOMYOPATHY is an often overlooked cause of potential morbidity and mortality in the perinatal period. It is development of heart muscle disease either in the last month of pregnancy or within twenty weeks after delivery in the absence of predisposing heart disease.¹ From an insidious onset of exertional dyspnea, orthopnea, cough and generalized weakness, end stage cardiomyopic congestive heart failure with all its complications can more likely develop if the disease goes unrecognized.

Case Report

V.L. was a 32-year-old black female seen following a two-week history of malaise, a progressive nonproductive cough, mild orthopnea and anterior chest wall pain which radiated to her back and worsened when supine. She had been seen by her local physician two days prior to her referral and was found to have an enlarged cardiac silhouette and a pulmonary infiltrate.

Her past medical history was significant in that she was 10 weeks postpartum from a 39-week gestation. She had been followed closely throughout her pregnancy. Her only complication was mild first trimester hypertension, which she had experienced with her previous five pregnancies. She was maintained during the pregnancy on methyldopa 500 mg bid and hydralazine hydrochloride 25 mg tid with good control. When admitted in labor, her physical exam, including blood pressure, was within normal

limits, and she had an uncomplicated spontaneous vaginal delivery. Her postpartum course was complicated with systolic blood pressure readings as high as 188 mm Hg and diastolic pressures up to 118 mm Hg. Her hypertension was easily controlled with the methyldopa and the hydralazine hydrochloride, and the patient was discharged on these medications on the fourth postpartum day.

On her admission to Mississippi Baptist Medical Center 10 weeks later, she was in no acute distress; however, her physical exam revealed a blood pressure of 140/112 mm Hg, bibasilar rales and an S₄ gallop. Admission CBC, electrolytes and blood chemistries were within normal limits. An electrocardiogram revealed left ventricular hypertrophy with secondary QRS widening and an abnormal ST-T segment consistent with lateral ischemia. Chest x-ray revealed cardiomegaly with a cardiothoracic ratio of 18 cm to 29.8 cm, bilateral pulmonary edema, and prominent pulmonary vasculature compatible with congestive heart failure. She was placed on oxygen therapy as well as low dose furosemide with prompt clearing of her pulmonary edema. She was empirically continued on erythromycin, which had been begun by her local physician. Subsequent sputum cultures revealed moderate growth of *Hemophilus influenza*.

An echocardiogram revealed four-chamber enlargement consistent with dilated cardiomyopathy. There was no evidence of valvular abnormalities or effusion. However, a large left apical thrombus was noted. She was begun on parenteral heparin and concurrent warfarin therapy; aggressive treatment

From the Department of Family Medicine, University Medical Center, Jackson, MS.

of her hypertension was begun with methyldopa, hydroxyzine hydrochloride, and prazosin hydrochloride. After adequate anticoagulation was obtained, the patient was discharged to the care of her local family physician on warfarin sodium 5 mg daily, furosemide 20 mg daily, prazosin hydrochloride 1 mg tid, methyldopa 500 mg bid, hydralazine hydrochloride 50 mg bid, and ampicillin 250 mg qid. After two months the chest x-ray revealed no decrease in heart size. At five months post discharge she was asymptomatic and normotensive with return to minimal work. Chest x-ray at that point did not reveal any significant decrease in cardiac size. She did not return for six-month follow-up.

Discussion

Incidence. Peripartum cardiomyopathy affects one out of every 1300 live births and one out of 3000 to 4000 confinements.² Women most commonly affected are multigravidas in their third decade of life.¹ Peripartum cardiomyopathy occurs with greater frequency in black women, women of low socioeconomic status and women from the southern United States; prevalence is highest in continental Africa.²

Etiology. This syndrome is a multifactorial disease for which many etiologies and association have been postulated. These include (1) nutritional deficiencies, especially protein, (2) preexisting preeclampsia (seen in 15 to 30 percent of patients), (3) viral infections acquired around the time of delivery (implicating Cocksackie B, influenza and herpes viruses), and (4) fetal production of antimyocardial antibodies damaging to maternal myocardium.³ The isolation of antibodies in maternal blood has suggested an autoimmune reaction to the smooth muscle products of the rapidly involuting uterus and syncytiotrophoblastic tissue. In many cases of postpartum cardiomyopathy, there is a family history of postpartal heart failure.⁴⁻⁷

Symptoms. Initially most patients give a history of insidious onset of dyspnea on exertion, palpitations, paroxysmal nocturnal dyspnea, cough, orthopnea, weakness and general malaise. Symptoms begin two to twenty weeks postpartum. Fifty percent complain of a vague precordial discomfort.⁵ Lower extremity edema is also common.

Physical. A physical exam may reveal signs of mild to severe congestive heart failure: jugular venous distention, an S₃ gallop, an apical pansystolic murmur of mitral regurgitation, and bibasilar rales. Cardiac arrhythmias occur in 1/3 of cases.² One-half will have hepatomegaly secondary to passive congestion of the liver.⁵

Diagnostic studies. Hematological data is of vir-

tually no aid in diagnosis. The CBC is normal in most cases. If present, microcytic hypochromic anemia is a result of malnutrition.

The electrocardiogram is nearly always abnormal, revealing atrial fibrillation or other arrhythmias, frequent PVC's and T-wave abnormalities (inversion, flattening and biphasic T-waves). QRS complexes may be widened.

Chest x-ray reveals generalized cardiomegaly with no specific chamber enlargement. There may be signs of concomitant congestive heart failure, pulmonary edema, or infiltrate. The echocardiogram confirms poor cardiac function and is necessary to identify one of the major complications — apical thrombi.

Complications. The most serious complications are progressive pump failure, cardiac arrhythmias and embolization to the pulmonary and cerebral vasculature. On an autopsy, the pericardium is found to be normal, whereas the myocardium is flabby. Mural thrombi are frequently identified, and chronic congestion of the lungs and the abdominal organs is often noted. Bronchopneumonia has been reported.^{3, 5}

Treatment. Management of peripartum cardiomyopathy involves (1) prevention of known complications by use of anticoagulants and antiarrhythmic agents, (2) correction of the underlying causes, such as hypertension and malnutrition, and (3) support of cardiac function with digoxin and bed rest. Anticoagulants are generally recommended as long as the chest x-ray exhibits cardiomegaly. Steroid treatment has even been advocated, though its effectiveness has not been demonstrated. Beginning immediately after diagnosis, six to twelve months of strict bed rest is imperative, as prognosis directly correlates with early initiation of treatment. The patient's activity level should progress only after a follow-up chest x-ray reveals normalization of heart size.

Prognosis. Long-term monitoring of patients consists of serial chest x-rays to assess cardiac size and echocardiograms to evaluate function. Prognosis is dependent on reduction of heart size within six months of diagnosis. According to one study, a reduced cardiac silhouette is achieved in only 50 percent of patients overall and in none who are symptomatic for more than seven months.⁵ For those whose cardiomegaly does not resolve, outlook is poor with death generally occurring two to three years from onset. Seventy-five to eighty percent suffer myocardial infarctions; pulmonary emboli are a frequent cause of mortality. If cardiomegaly resolves, the patient may return to an active life with

competitive exercise the only restriction. In patients whose cardiomegaly resolves, mortality from complications is about 14 percent.¹ Subsequent pregnancy puts the woman at high risk for recurrence of her cardiomyopathy and is contraindicated. Early termination may be advised. Even after complete recovery from the initial episode, subsequent pregnancy carries a 15 percent relapse rate for manifestations of cardiomyopathy. Exacerbations of heart disease occur with much greater frequency in patients who did not experience initial recovery.⁹ If the pregnancy is continued, complete bedrest is imperative for at least four months prior to delivery and two months postpartum. Disease will recur in 88 percent of patients not following bed rest recommendations.² Although pregnancy prevention is of primary concern in these patients, oral contraceptives add to their increased risk of embolic phenomena; therefore, alternate contraceptive methods are preferable, including permanent sterilization.

Peripartum cardiomyopathy is a potentially life-threatening complication of pregnancy. The physician's alertness to early diagnostic signs and symptoms will allow aggressive intervention to decrease morbidity and mortality from this disease.

★★★

2500 North State Street (39216)

References

1. Demakis JG, Rahimtoola SH, Sutton GC, et al: Natural course of peripartum cardiomyopathy. *Circulation* 1971;44:1053-1061.
2. Burch GE, Giles TD, TSui C: Postpartal cardiomyopathy. *Cardiovascular Clinics* 1972;4(1):270-282.
3. Becker FF, Taube H: Myocarditis of obscure etiology associated with pregnancy. *N Eng J Med* 1962;266:62.
4. Walsh JJ, Bevilacqua GE, Black WC, et al: Idiopathic myocardopathy of the puererium (postpartal heart disease). *Circulation* 1965;32:19-31.
5. Demakis JG, Rahimtoola SH: Peripartum cardiomyopathy. *Circulation* 1971;44:964-968.
6. Pierce JA, Price BO, Joyce JW: Familial occurrence of postpartal heart failure. *Arch Intern Med* 1963;111:651-655.
7. Julian OG, Szekely P: Peripartum cardiomyopathy. *Progress in Cardiovascular Diseases* 1985;27(4):223-240.
8. Burch GE, McDonald CD, Walsh JJ: The effect of prolonged bed rest on postpartal cardiomyopathy. *American Heart J* 1971;81(2):186-201.
9. Van der Leeuw-Harmsen L, de Graaff J, and Chappin JJML. Case report peripartal cardiomyopathy. *European Journal Obstetric Gynecol. Reprod Biol* 1985;19:59-65.

YOCON[®]

YOHIMBINE HCl

Description: Yohimbine is a 3a-15a-20B-17a-hydroxy Yohimbine-16a-carboxylic acid methyl ester. The alkaloid is found in Rubaceae and related trees. Also in *Rauwolfia Serpentina* (L) Benth. Yohimbine is an indolalkylamine alkaloid with chemical similarity to reserpine. It is a crystalline powder, odorless. Each compressed tablet contains (1/12 gr.) 5.4 mg of Yohimbine Hydrochloride.

Action: Yohimbine blocks presynaptic alpha-2 adrenergic receptors. Its action on peripheral blood vessels resembles that of reserpine, though it is weaker and of short duration. Yohimbine's peripheral autonomic nervous system effect is to increase parasympathetic (cholinergic) and decrease sympathetic (adrenergic) activity. It is to be noted that in male sexual performance, erection is linked to cholinergic activity and to alpha-2 adrenergic blockade which may theoretically result in increased penile inflow, decreased penile outflow or both.

Yohimbine exerts a stimulating action on the mood and may increase anxiety. Such actions have not been adequately studied or related to dosage although they appear to require high doses of the drug. Yohimbine has a mild anti-diuretic action, probably via stimulation of hypothalamic centers and release of posterior pituitary hormone.

Reportedly, Yohimbine exerts no significant influence on cardiac stimulation and other effects mediated by B-adrenergic receptors, its effect on blood pressure, if any, would be to lower it; however no adequate studies are at hand to quantitate this effect in terms of Yohimbine dosage.

Indications: Yocon[®] is indicated as a sympatholytic and mydriatic. It may have activity as an aphrodisiac.

Contraindications: Renal diseases, and patient's sensitive to the drug. In view of the limited and inadequate information at hand, no precise tabulation can be offered of additional contraindications.

Warning: Generally, this drug is not proposed for use in females and certainly must not be used during pregnancy. Neither is this drug proposed for use in pediatric, geriatric or cardio-renal patients with gastric or duodenal ulcer history. Nor should it be used in conjunction with mood-modifying drugs such as antidepressants, or in psychiatric patients in general.

Adverse Reactions: Yohimbine readily penetrates the (CNS) and produces a complex pattern of responses in lower doses than required to produce peripheral a-adrenergic blockade. These include, anti-diuresis, a general picture of central excitation including elevation of blood pressure and heart rate, increased motor activity, irritability and tremor. Sweating, nausea and vomiting are common after parenteral administration of the drug.^{1,2} Also dizziness, headache, skin flushing reported when used orally.^{1,3}

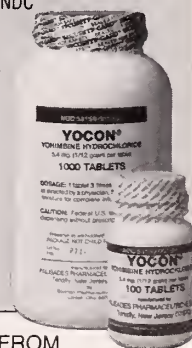
Dosage and Administration: Experimental dosage reported in treatment of erectile impotence.^{1,3,4} 1 tablet (5.4 mg) 3 times a day, to adult males taken orally. Occasional side effects reported with this dosage are nausea, dizziness or nervousness. In the event of side effects dosage to be reduced to 1/2 tablet 3 times a day, followed by gradual increases to 1 tablet 3 times a day. Reported therapy not more than 10 weeks.³

How Supplied: Oral tablets of Yocon[®] 1/12 gr. 5.4 mg in bottles of 100's NDC 53159-001-01 and 1000's NDC 53159-001-10.

References:

1. A. Morales et al., *New England Journal of Medicine*: 1221, November 12, 1981.
2. Goodman, Gilman — *The Pharmacological basis of Therapeutics* 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. *Weekly Urological Clinical letter*, 27:2, July 4, 1983.
4. A. Morales et al., *The Journal of Urology* 128: 45-47, 1982.

Rev. 1/85



AVAILABLE EXCLUSIVELY FROM
**PALISADES
 PHARMACEUTICALS, INC.**
 219 County Road
 Tenafly, New Jersey 07670
 (201) 569-8502
 Outside NJ 1-800-237-9083

**You're
a Professional.**

**You need Professional
Health Insurance
Coverage.**

MSMA

Benefit Plan and Trust

MSMA Benefit Plan and Trust is a superior insurance program which fulfills the quality of coverage and affordability that everyone wants.

Sponsored by the Mississippi State Medical Association, the MSMA Benefit Plan and Trust offers life and health benefits to physician members of MSMA, their employees and families.

- \$1,000,000 lifetime benefits.
- Life Coverage up to \$50,000.
- Broad benefits with fair and equitable rates.
- Management by and for physicians.
- Non-profit and administered at lowest possible cost.

For Complete Description of Benefits Write:

MSMA Benefit Plan and Trust

P.O. Box 55509
Jackson, MS 39216

The Use of Allografts in Anterior Cervical Interbody Fusion

RODNEY E. FROTHINGHAM, M.D.

ALEXANDRE SOLOMON, M.D.

Greenville, Mississippi

WHEN CHARLES KINGSLEY, in 1855, noted that there are "more ways of killing a cat . . .," he could very well have been referring to the anterior cervical spine operative procedure. A review of the literature makes it clear that there is no single "right way" to perform this operation. Many series are reported, using different techniques. Some prefer disc removal without bone graft(s).³ Others have reported disectomy with various grafts, such as autogenous grafts (autograft), allograft, xenograft, etc.^{1, 2, 4} The grafts may be prepared in various ways, such as, lyophilization, irradiation, chemical extraction, etc. Various operative techniques are used, including the technique of Cloward and the Smith-Robinson procedure. The results obtained with any of the above or combinations thereof, appear to be comparable as regards relief of symptoms, successful fusion and complications.

Having used a number of the above techniques through the years, we have found that anterior cervical disectomy with bone bank graft (allograft) has proven most effective.

Technique

Skull bone removed from the occipital area of cadavers was selected because of the predominance of cortical bone and the relative ease with which it could be obtained at autopsy. This bone yields grafts that are uniformly strong and less prone to fracture or collapse.

Donors were closely screened for evidence of infection, neoplasm, or metabolic disease and were considered unacceptable if any of these conditions existed. Sterile technique is not necessary during the harvesting of the donor bone.

The bone taken is approximately one inch square and this will yield six to eight grafts. The donor bone square is first scraped clean of all soft tissue. It is then allowed to air-dry for several weeks. The square is cut into individual grafts of desired sizes and shapes. The corners are rounded to produce a somewhat ovoid graft, which we have found gives a more secure fit when placed in the intervertebral space. The individual grafts are next chemically treated using repetitive baths of alcohol, ether, and/or acetone until the solvent is clear on three successive extractions. The grafts are allowed to completely air-dry between successive extractions. Next, the grafts are soaked in hydrogen peroxide until bleached white. Once again, they are air-dried and now represent an essentially non-antigenic, bioresorbable implant of hydroxyapatite (see Figure 1).



Figure 1. A typical finished bone graft. Approximate size is 10 x 8 x 7 mm.

From the Department of Neurosurgery, Delta Medical Center, Greenville, MS. Drs. Frothingham and Solomon are engaged in the private practice of neurosurgery in Greenville, MS.



Figure 2. A bone graft, double-wrapped for gas sterilization.



Figure 3. A solid fusion is noted with allograft (A), whereas fusion failed to occur from a previous operation with autogenous bone (B).

Each graft is individually double-packaged and hermetically sealed in special sterilizing paper (Medi-plus) prior to gas sterilization (see Figure 2). The 3 M Model 400B gas sterilizer with Amsco ethylene oxide gas is used for sterilization. Each run is accompanied by a 3 M attest indicator to confirm sterility. If not used within six months, the graft is routinely re-sterilized. This repeated sterilization does not affect the graft's ability to successfully bring about fusion. In fact, successful fusion occurred in one case in which the graft had undergone over 150 sterilizations. The finished grafts are stored at room temperature on a shelf in the operating room. The estimated cost of each graft prepared by the above method is less than one dollar (\$1.00).

Patient Population

During the period from October 1980 to April 1985, 100 patients were operated on, using a modified Smith-Robinson technique, with bone bank grafts. A total of 129 intervertebral disc levels were operated, using one or more allografts per level. There were 42 males and 58 females in this series,



Figure 4. A solid two-level fusion using allografts without vertebral decortication (arrows).

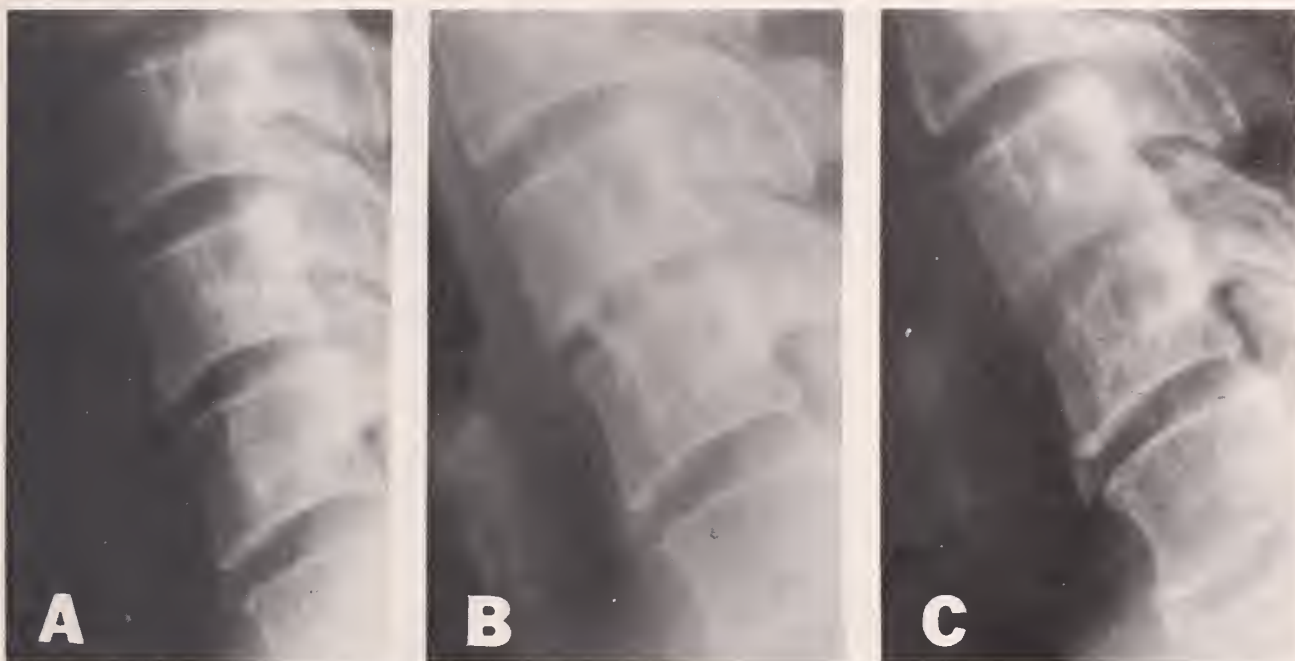


Figure 5. A typical fusion sequence showing the vertebrae before bone graft (A); immediately following grafting (B); and a solid fusion by the process of "creeping substitution" (C).

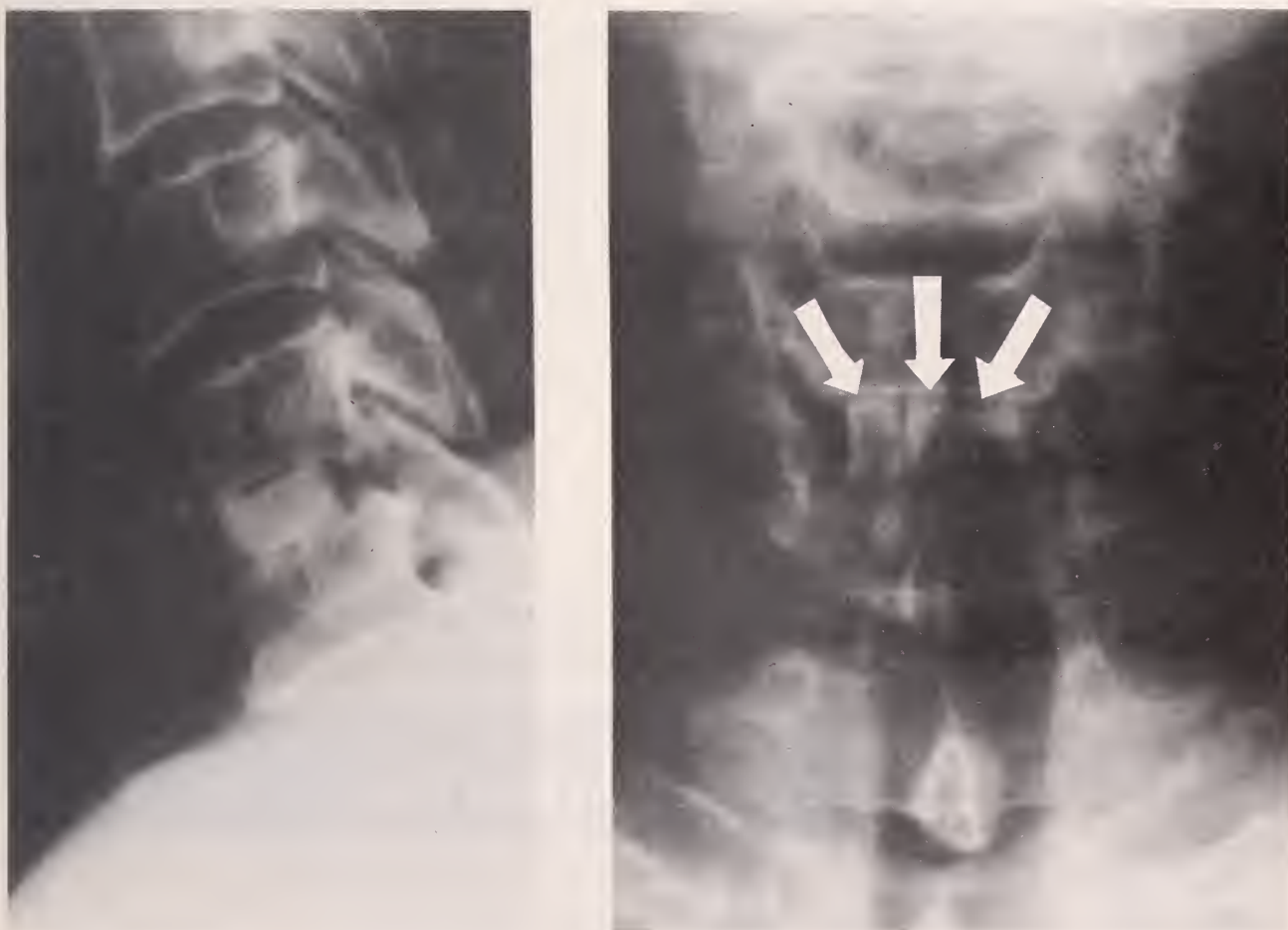


Figure 6. A large intervertebral space requiring three individual grafts placed side by side (arrows).

ranging in age from 16 to 68 years (median age = 46 years).

The pathological processes requiring surgical intervention were:

Herniated nucleus pulposus (soft disc)	76%
Spondylosis (hard disc)	22%
Trauma (fracture/dislocation)	2%

The vertebral levels requiring operation were:

C 3-4	2%
C 4-5	13%
C 5-6	48%
C 6-7	35%
C7-T1	2%

Results

The patients in this series were followed for a period ranging from a minimum of two years up to a maximum of six and a half years. Patients were categorized based on their complaints of pain and their ability/inability to return to gainful employment. Those able to return to work with little or no pain were considered to represent satisfactory results (87.5%), while those unable to return to work constituted the unsatisfactory group (12.5%). There was an approximately 90% fusion rate. However, those patients who did not obtain a fusion did not necessarily fall into the unsatisfactory category. We have had no bone graft-related complications. That is, there has been no infection, rejection, or fracture of the grafts.

Discussion

The authors feel that this series of patients makes it clear that "fresh" autogenous bone grafts with

osteogenic activity are not required for successful interbody fusion (see Figure 3). It is also apparent that decortication of the vertebral surfaces is not necessary to obtain osteogenic activity and subsequent fusion (see Figure 4). We feel, as others have proposed, that the bone graft is simply a spacer that allows the vertebral bodies to be maintained in a near anatomical relationship while the graft is replaced by a process of "creeping substitution" (see Figure 5). Among the advantages of this bone bank technique are:

- (a) A second operative site is not required to obtain the graft.
- (b) Post-operative pain is reduced.
- (c) Operative time is reduced.
- (d) Bone grafts of varying sizes and shapes allow greater versatility and individualization (see Figure 6).
- (e) Post-operative hospital stay is shortened.
- (f) The bone grafts are quite inexpensive.
- (g) All of the above contribute to a significant reduction in hospital costs. ★★★

526 Fairview Avenue (38701)

References

1. Benoit, B.G., Russell, N.A.: The use of xenografts in anterior cervical interbody fusions: Presented at The Congress of Neurological Surgeons meeting, Chicago, IL 1983.
2. Cloward, R.C.: Gas-sterilized cadaver bone grafts for spinal fusion. A simplified bone bank. *Spine* 5:4-10.
3. Robertson, J.T.: Anterior removal of cervical disc without fusion. *Clinical Neurosurgery* 20:259-261, 1973.
4. Rosenorn, C., Hansen, E.B., Rosenorn, M.A.: Anterior cervical disectomy with and without fusion. A prospective study. *Journal of Neurosurgery* 59:252-255, 1983.

**For all the supplies you can think of,
come to the Source.**

OffiSource

Business Furnishings / Supplies / Machines
277 E. Pearl St. / Jackson, MS 39205
352-9000 / Toll-free 1-800-682-5399

The Primary Care Physician's Role in Management of the Patient With Myelomeningocele

MARILYN D. GRAVES, M.D.

GLEN R. GRAVES, M.D.

MARCIA BARRON, ED.S.

Jackson, Mississippi

IN ADDITION TO specialty care addressed in previous articles of this series, children with myelomeningocele need basic newborn and pediatric care. The primary care physician should function as coordinator of the complex care and treatment necessary for the child with myelomeningocele and as primary medical support for the family.

When the diagnosis of neural tube defect is made, whether pre- or post-delivery, the neonatologist and the infant's primary care physician should be involved, along with other specialists, in counseling and planning. A major role of the primary care physician is to synthesize for the family the information which it receives from various disciplines. Following delivery, the physician attending the infant has first contact with the family and plays a crucial role in continuing to coordinate the consultants and the flow of information to the family.

At birth, parents naturally focus on "fixing" the obvious defects. They should clearly understand that even though the defect will be surgically closed, the condition will not be "fixed." Parents should also understand the importance of a transitional period of 8-24 hours after birth to observe for cardio-respiratory stability and to search for other congenital anomalies. Orthopaedic and urology specialists should be consulted during the child's initial hospitalization. Because of the multi-disciplinary needs

This is the eighth in a series of articles on current concepts in the care and habilitation of the child with myelomeningocele.

of these infants, the Guidelines of Perinatal Care¹ (a joint publication of the American College of Obstetrics-Gynecology and the American Academy of Pediatrics) recommends that these infants be delivered at or immediately transferred to a tertiary care center.

At birth, the care of a defect is an immediate concern for the primary care physician. Scrupulous sterile technique is extremely important. Sterile gloves and towels should be used when handling the infant. If transfer to a tertiary facility is needed and membranes are covering the defect, antibiotic ointment may be used to cover the defect while in transit. An alternative method is the use of sterile gauze saturated with sterile saline. If this method is used, it is extremely important that the gauze not be allowed to dry. If this happens, removal of the dressings will actually debride membranes that may be protecting the defect. Therefore, sterile saline must be repeatedly applied to the dressing at frequent intervals (every 15-30 minutes) and the gauze covered with an occlusive dressing such as Saran Wrap. In either method, maintaining sterility is imperative.

Parents, regardless of initial counseling and education, will not be able to process and digest the magnitude or complexities of the lifelong problems related to this diagnosis. They need ongoing support

Dr. Marilyn Graves is medical director, Mississippi Children's Rehabilitation Center. Dr. Glen Graves is assistant professor, Department of Pediatrics, University Medical Center. Ms. Barron is education specialist at Mississippi Children's Rehabilitation Center.

and education. Experienced neonatal nurses and social workers are invaluable in the initial team care. Nurses offer practical information on handling, positioning, and caring for infants with special needs. Social workers provide emotional support, as well as timely referrals to appropriate agencies and advocacy groups. Families need to know that they are involved with a readily available care system.

Additional Concerns

Parents need education in growth and development with special attention to their child's limitations. Height, weight, head circumference, blood pressure, and renal function should be monitored regularly. Immunizations should be given according to recommendations of the American Academy of Pediatrics.²

Obesity

Obesity in these children should be anticipated because of limited physical activity. This condition should aggressively be prevented. Family, including extended family, and patient need to be aware that obesity will affect function, specifically ambulation, self-help skills, transfer ability, fitting of orthoses and wheelchairs. Possibly the most important effect of obesity is its impact on self-image as the child enters adolescence. Exercise, in addition to recommended therapeutic programs, is necessary to utilize calories, to promote social skills, and to promote general well-being. Wheelchair sports (tennis and basketball) and swimming are excellent activities for persons with physical limitations. Children should be encouraged to be participants, not just observers.

Vision

Because of frequent ocular muscle imbalance and visual motor and visual perception problems, children with myelomeningocele need ophthalmological consultation to insure maximum visual acuity. Examinations are recommended at the time problems are noted, or certainly prior to age 6.

Neurogenic Bowel

In the child with neurogenic bowel, a bowel program should be initiated early. The goals of this program are:

1. To establish a regular controlled schedule of elimination that will not interfere with normal activity.
2. To eliminate bowel accidents.

Control is difficult and usually necessitates a trial and error approach. Diet, especially fiber, bulk, and water, is of primary importance. A stool softener and suppository, either glycerin or medicated, may be effective in initiating bowel emptying. If not, the physician should not hesitate to recommend laxative therapy since dependency is not a concern with a neurogenic bowel. Ideally, the time of any medication and the time of result should be coordinated so that the child can be on the toilet with knees flexed, feet supported, and abdominal massage utilized for complete emptying of the bowel. Digital removal or stimulation may be a possibility for patients as they become more concerned with the efficiency of their program. Enemas are not recommended. With a successful bowel program and bladder program (see Part III of series), children may be "pamper-free." Several commercial products are available and are more satisfactory for older patients who have not achieved an acceptable degree of continence. Odor, as a social problem, may be minimized with the use of chlorophyll tablets.

Education

Families and professionals should be alert to the possibility of language problems. Children with myelomeningocele often exhibit "cocktail party syndrome," ie inappropriate or excessive expressive language but delayed receptive language.³ This pattern of language may mask true cognitive or intellectual functioning. In a study recently completed at Mississippi Children's Rehabilitation Center, the Weschler Intelligence Scale for Children-Revised (WISC-R) was utilized to measure intellectual functioning of 20 children with myelomeningocele, who were born between 1975 and 1980. The findings indicated that the intellectual functioning of children with myelomeningocele differed significantly from the WISC-R standardization population. A significant statistical difference between Verbal and Performance IQ scores was found, with Verbal IQ scores being significantly greater than both Performance and Full Scale IQ scores (see Table 1). However, a large range of scores occurred on all IQ measures, thereby attesting to unique individual intellectual profiles (see Table 2).

These findings have significant implication for educational programming for this population. Contrary to earlier studies, the level of lesion did not significantly correlate with intellectual functioning in this investigation.

In order to care for patients with disabilities, professionals need to be aware of available public school services mandated by P.L. 94-142 and now

TABLE 1
MEAN SCORES FOR VERBAL, PERFORMANCE, AND
FULL SCALE IQs.

Variable	Mean	Standard Deviation	Range
VIQ	82.25	16.55	50-107
PIQ	74.45	18.07	45-101
FSIQ	76.40	17.87	43-101

TABLE 2
MODAL SCORES FOR VERBAL, PERFORMANCE, AND
FULL SCALE IQs.

Variable	-4SD		-3SD		-2SD		-1SD		+1SD	
	N	%	N	%	N	%	N	%	N	%
VIQ	1	5	5	25	4	20	8	40	2	10
PIQ	4	20	2	10	8	40	5	25	1	5
FSIQ	4	20	2	10	7	35	6	30	1	5

expanded by P.L. 99-457. Under this federal regulation, handicapped children are afforded a free, appropriate, public education (FAPE) in a least restrictive environment (LRE). Services are mandated for school age children, and, at this time, permissive for 3 and 4-year-olds. The Education of the Handicapped Act Amendments (P.L. 99-457) created a discretionary program for states to address the needs of disabled and at-risk infants and toddlers from birth to age 5.

Contact should be made early with local education programs to insure that children will receive appropriate services. The Committee on Children with Disabilities of the American Academy of Pediatrics has recommended that the pediatrician request copies of his patient's Individualized Education Plan (IEP), so that he can participate in the child's interdisciplinary treatment. The physician needs to assess whether health related services are appropriate and sufficiently comprehensive and to coordinate education programming with the child's

medical treatment, so that all issues relating to function and development can be addressed.

A major component of each child's treatment should be an aggressive habilitation program. Pediatric habilitation, as compared to adult rehabilitation, is complicated by the fact that the child must achieve skills that have never been acquired, in contrast to rehabilitation, where skills that have been lost are regained. Motivation of the patient, parents, extended family, and professionals to participate in a consistent program of habilitation is a major issue. Beginning this process early is important so that throughout his lifetime a child with myelomeningocele is taught and expected to reach maximum independence, to exhibit responsibility to himself, to contribute to family and community, to participate in decisions regarding his care and his future, and to achieve optimal educational and vocational goals.

★★★

Dr. Marilyn Graves: P.O. Box 4663 (39216)

Acknowledgement

As coordinator of the series, "Current Concepts: Care and Habilitation of the Child With Myelomeningocele — a Multidisciplinary Approach," I (MDG) would like to express appreciation to the physicians and their colleagues who contributed to this series, to their secretaries who were invaluable to this effort, and to the editors and staff of *Journal MSMA*, who were most supportive and cooperative. The contributing physicians are to be commended for their commitment to providing quality care to patients with myelomeningocele and their families.

References

1. American Academy of Pediatrics. *Guidelines of Perinatal Care*, 1983. Evanston, Ill: American Academy of Pediatrics; Washington, D. C.: American College of Obstetrics and Gynecology.
2. Report of the Committee on Infectious Disease, American Academy of Pediatrics; Peter G. Ed, 1986: 9, 41, 272-275.
3. Horn, D. Distractibility and Vocabulary Deficits in Children With Spina Bifida and Hydrocephalus; *Developmental Medicine and Child Neurology* 27:713-719, 1985.
4. Committee on Children with Disabilities, American Academy of Pediatrics, Pediatrician's Role in Development and Implementation of an Individual Education Plan, *Pediatrics* 80:750-751, 1987.

Final Report and Recommendations of Mississippi's Health Curriculum Committee

IN MAY 1986 a twenty-member task force was appointed by the Mississippi State Board of Education to begin developing recommendations for a health education curriculum for the public schools in Mississippi for grades kindergarten through 12. Since that time the Health Curriculum Committee, which is composed of a broad cross-section of individuals interested in school health, has been gathering and evaluating data. This committee includes individuals involved in professional health education, school superintendents, school principals, state legislators, teen health educators, registered nurses, interested and knowledgeable lay-persons, and physicians. Three of the physicians on this committee are pediatricians and a fourth physician is involved with substance abuse and rehabilitation programs. The State Health Department is represented on the committee, as are the state PTA and those involved with community action groups. Funding for this committee is a cooperative and joint effort of the Mississippi State Department of Health and the Mississippi State Department of Education.

It is certainly no revelation to this particular group that school health education is important. Major public health problems such as suicide, accidents, venereal disease, heart disease, obesity, alcohol and other substance abuses, health misconceptions, the lack of accurate health information, and the continuing rise in the cost of health care are but a few of the reasons for health education programs in the schools. The predominant impetus for a health education program in Mississippi is the very high and tragic teenage pregnancy rate and its associated infant mortality and morbidity problems. This teen pregnancy rate has great meaning for the future of

our citizens, our communities, and our state. Teen parents face greater risks of poverty, unemployment, welfare dependency, divorce, child abuse, incomplete educational background, and having more children at an earlier age.

Recognizing that most of these health-related problems are preventable or alterable, practically all national and state health education organizations have supported development and implementation of comprehensive school health education programs. Previous studies, the National School Health Education Study in particular, found a lack of coordination of health education programs throughout the school grades; inadequate professional staff preparation; a lack of interest on the part of some teachers assigned to health teaching; and that school health education in most primary and secondary grades is either not available or is tacked to another subject where it is assigned to teachers whose primary interests and qualifications lie elsewhere.

Innumerable studies done by federal agencies and private foundations, and numerous polls conducted by the Associated Press and others, have demonstrated the need for health education, and public support for health education in the schools. They have highly recommended that health education courses be a part of a required curriculum in all schools. Individual teachers, and organizations at the national level, have also given broad-based support for the inclusion of comprehensive health education in the school curriculum. Too often, support has taken the form of pronouncements rather than actions.

This committee found a wealth of material available on any health subject related to children. However, we found few comprehensive, systematic, realistic programs that were being implemented in a broad-based manner. The committee unanimously and firmly believes that the only effective way the

Condensed from a report presented to and approved by the Mississippi State Board of Education, September 1987. Dr. J. Edward Hill, Hollandale, MS, served as chairman of the Health Curriculum Committee.

schools can fulfill their responsibility for the many health needs of its youth is through comprehensive health education, appropriately sequenced to include K-12. We also feel it is time for action now and time for the implementation of well planned health education instruction in Mississippi schools. Indeed, it is long overdue.

We believe that if our youth were given relevant information and decision-making skills, systematically and professionally presented at a time in their lives when it could be of some value, they might very well solve the majority of these health problems themselves by exercising that self-same common sense for which we often do not give them credit. We propose to you that if solutions to health-related problems do not come by positive decisions of an enlightened youth, then solutions are not likely to come at all.

We believe that comprehensive health education develops skills for daily living and prepares individuals for their future roles as parents and adult citizens. Recent trends underscore the need for informed, educated individuals with the knowledge, skills, and motivation to assume responsible roles in personal, family and community health. We believe that the commitment to comprehensive health education must be established now and be maintained into the next century. Educators and all citizens must guarantee that efforts are made to emphasize health as a value in life and enhance the critical thinking, decision-making, and problem solving skills regarding health. Quality health education motivates individuals to voluntarily take an active role in protecting, preserving and promoting their health.

The overriding emphasis of our philosophy is upon having individuals successfully develop, establish, and achieve positive lifestyle goals. These goals enhance the probability of life long participation in health-promoting behaviors with resulting total health benefits. Specifically, this philosophy is grounded on two fundamental principles. The first principle is that health issues are approached in a positive manner. Comprehensive health education is a basic ingredient in a prevention formula. It can encourage the individual in the community to assume responsibility for the promotion of well-being and prevention of disease and disability. Most premature deaths and infirmities can be prevented by positive health practices and appropriate health care. The second principle is based on "the whole person" concept, which recognizes that each individual is multidimensional. The physical, emotional, social, and intellectual dimensions of each person are

"Recognizing that most of these health-related problems are preventable or alterable, practically all national and state health education organizations have supported development and implementation of comprehensive school health education programs."

dramatically intertwined, and are influenced by time, setting, situation, and other people. Acknowledgement and nurturing of these interactions with the individual and with others are critical to successful health promotion.

A comprehensive health education program can make a difference, and it can influence the quality of life for present and subsequent generations. It is, therefore, with the greatest optimism and enthusiasm that improvement of the health status of our state's residents should be approached by the home/school/community team. The time for health education to emerge as a high priority in the curriculum has arrived. Positive health for all by the year 2000 is not only attainable, it is essential. When one only considers the tremendous financial costs of preventable health problems, school health education and health promotion programs are economically irresistible.

Activities

We began our activities with a state-wide telephone survey, conducted in the Summer of 1986 for the Department of Education under the auspices of the Social Science Research Center at Mississippi State University. Random sampling techniques provided responses from 713 Mississippi households. All respondents were age 18 or older.

This survey represents a strong statement of support from Mississippians for comprehensive health programs, including sex education in the schools. Nearly all respondents (95.9%) agreed that the health department should watch for health problems, and between 79 and 91% agreed that, specifically, they should try and correct health problems relating to alcohol, drugs, fitness, sex activity, and suicide. Almost nine in ten respondents (87.3%) supported providing sex education in the schools if age/grade were considered. When asked about teaching sex education in high school, 84.3% were supportive, while fewer (48.2%) supported providing sex education in elementary schools.

It is redundant but important to state that this committee considers this survey a mandate from the citizens of the State of Mississippi for action to be

taken in these very critical and sensitive areas of health education.

With this broad support, the committee set about learning from experts. We initially heard from health education specialists who, in an almost pleading manner, recommended some long-lasting, long-term solutions to multiple problems in health education. The committee had access to volumes of material on subjects and concepts such as "Me-ology"; family life education, including sex education and responsible decision-making; substance abuse and use; physical fitness and physical education; nutrition; community health; injury prevention; consumer health; and environmental health. This literature and material offered diverse solutions and opinions to all of these problems. We heard from epidemiologists concerning the scope of public health hazards associated with sexually-transmitted diseases. We heard a specific discussion on the importance of AIDS education as it pertains to the public schools. We heard reports of measurable results from school health clinic programs. We also heard opposing viewpoints from individuals who disputed the alleged drop in teenage pregnancy rate from these types of school health clinic projects. We received input from the Center for Disease Control specifically concerning state policies on health education throughout the country. The CDC was in general agreement with health educators that in order for health education curricula or programs to be comprehensive and have any lasting effect, health educators had to be actively involved in their development.

"We propose to you that if solutions to health-related problems do not come by positive decisions of an enlightened youth, then solutions are not likely to come at all."

The committee members contributed substantially. They offered suggestions ranging from specific, essential topics in any health care curriculum to a general administrative outline of exactly how a health education curriculum should be structured.

We received much "unsolicited" information in the form of mail, audio and visual tapes, and from diverse groups. We heard from fundamentalist religious groups totally and absolutely opposed to any form of sex education in schools, and who emphasized that all of this type of teaching should be limited exclusively to the family and to the church structure.

We saw reports showing how the American fam-

"A comprehensive health education program can make a difference, and it can influence the quality of life for present and subsequent generations. . . . The time for health education to emerge as a high priority in the curriculum has arrived."

ily is not the traditional family, comprised of a husband who works, a wife who stays home, and 2½ children. This only occurs in 7% of the families in this country today. We heard statistics, and reviewed problems throughout our country, concerning single-parent homes, homes with both parents working regularly, and latch-key children.

We heard presentations about teenage pregnancy and low birth weight babies, and infant mortality and morbidity statistics, as well as the economic impact of these preventable realities on Mississippi's economy. Since the issue of teenage pregnancy in Mississippi had been the primary stimulus for the development of the Health Education Curriculum Committee, more time was spent in this area in the committee's work.

Among the facts we learned were the following. Mississippi has one of the highest proportions of babies born to teen mothers in the United States. In 1984, Mississippi teenagers bore 9,298 babies, accounting for 21.2% of all live births. In contrast, the percent of births to teens nationally was 13.7%. Of these, 66.1% were out-of-wedlock, compared with 43.7% nationally. Babies born to teenagers are twice as likely to die before their first birthday as babies born to mothers aged 20 through 29, and are more likely to be born with permanently handicapping conditions. Adolescent parents are more likely to receive public assistance, at an estimated cost of \$322 million in 1984. The first baby of a teen mother receiving public assistance is estimated to receive a total of \$15,620 from the state prior to age 20. If all 6,137 babies born out of wedlock in 1984 received this public assistance, the total cost would be \$95,859,940. Emotional consequences of premature pregnancy include higher divorce rates for teens not marrying before the baby is born; higher rates of attempted or actual suicide; and higher rates of child abuse/neglect. These human costs are probably immeasurable.

We heard from those who felt as if solutions were certainly available for teenage pregnancy. We looked at the family planning programs in the Mississippi State Department of Health; the Jackson/Hinds Comprehensive Health Center/school based clinics;

and the school nurse project for the Mississippi State Department of Health in the Meridian area and in the Delta area. We read literature and reports from the health clinic projects in other areas of the United States. We also read of the dilemmas and conflicting results created in the communities and schools where some of these programs had been implemented. One program claimed that there was an unequivocal reduction of teenage pregnancies in their school-age population. We then heard that same study refuted when other variables that contributed to the lower teenage birth rate, were included — particularly, increased abortion referrals.

The most controversial issue the committee addressed was that portion of comprehensive health education that deals with family life and sex education. This Health Education Curriculum Committee believes the public schools must be the starting point, the catalyst, for developing a close, cooperative coalition of the family, the church, and the community to teach responsible decision-making, and that this responsible decision-making should include human sexuality.

Throughout our entire discussion of this matter, this committee was completely unanimous in its sensitivity to the rights of parents and the community concerning moral issues. We do not wish to erode the rights of parents to teach their children their own values of human sexuality. However, it became very clear to us in our review of all the pertinent literature that the concept of each individual developing his/her own value system does not necessarily imply that it can be taught. Another significant aspect is that we did not find parents doing very well in their teaching. For example, not even “very good” parents are making an impact on the teenage pregnancy rate in Mississippi, where teenage pregnancy occurs among all socioeconomic strata and racial and ethnic groups.

As to the question of our recommendations regarding the use of school clinics to dispense birth control methods or provide abortion information, we agreed that this would go beyond the primary role of public schools, and is thus not recommended.

Criteria for Health Education

A comprehensive school health program encompasses three interdependent components: *health education*; *health services*; and a *healthful school environment*. The purpose of each of these program components complements and is complemented by the procedures and the activities of the other. Although such a program is school-based, it is rec-

“The overall picture of school-age children’s health, while deeply troubling, is not unbelievably bleak. . . . The opportunity is here to knit existing programs together into a comprehensive initiative to identify, quantify, prevent, and mediate the broad spectrum of threats to the physical, intellectual, emotional, and social health and well-being of our state’s youth.”

ognized that school personnel and students, as well as their families and communities, must be involved in its planning, implementation, and evaluation. Comprehensive school health programs include health instruction and services, and concern for the quality of the school’s physical, social, and emotional environment.

A comprehensive school health education program meets the following criteria:

- Instruction is intended to motivate health maintenance and promote wellness, not only to prevent disease or disability.
- Activities are designed to develop decision-making competencies related to health and health behavior.
- A planned, sequential, K-12 curriculum is based upon students’ needs and on current and emerging health concepts and societal issues.
- Opportunities exist for all students to develop and demonstrate health-related knowledge, attitudes, and practices.
- Integration of the physical, mental, emotional and social dimensions of health serves as the basis for study of the topic areas.

Summary

The overall picture of school-age children’s health, while deeply troubling, is not unbelievably bleak. Promising leads exist now. Useful practices have been identified, and responsive innovations are being developed and implemented by a number of public and private sector organizations.

A comprehensive School Health Education approach would draw on existing successful programs that target specific high risk behaviors in school-age population groups. The opportunity is here to knit existing programs together into a comprehensive initiative to identify, quantify, prevent, and mediate the broad spectrum of threats to the physical, intellectual, emotional, and social health and well-being of our state’s youth.

Rather than focusing on negative behaviors, this

approach would provide school-age children and their families with the knowledge, skills, incentives, and support they need to make positive decisions in favor of healthy behaviors.

Recommendations

Recommendations from the Health Curriculum Committee to the Mississippi State Board of Education are divided into short-term goals and long-term goals. These recommendations are presented in anticipation of substantial involvement with all constituencies in Mississippi.

Short-Term Recommendations

Recommendation I: Basic Organization and Staffing

- A. Immediately establish in the State Department of Education a program entitled "Mississippi Comprehensive School Health Program."
- B. Recruit and employ a Program Director, trained as a Health Educator (minimum Master's level, with administrative experience). Do this soon enough to coordinate and implement short-term recommendations beginning Fall 1987.
- C. Recruit and employ three Staff Coordinators for each critical area of comprehensive health education.
 1. School Health Services Coordinator (Master's-prepared, experienced nurse)
 2. School Instruction Coordinator (Master's-prepared in health education or baccalaureate-prepared, with experience)
 3. School Environmental Specialist (Master's-prepared in environmental health or baccalaureate-prepared, with experience)
- D. Utilize the Health Curriculum Committee in the recruitment and selection process.

Recommendation II: Interim Program Staff in Schools

- A. Place school nurses in each school district to provide health services for Mississippi's K-12 public school students. It is recommended that this be implemented by Fall 1987, and emulate the present pilot programs (eg, in Lauderdale and Kemper Counties).
- B. Require specific, intensive *instruction in health education for all nurses and others* teaching health content in schools. (The minimum instruction is one week, and a major Mississippi University, with experience in training health educators, has expressed interest in offering this type of instruction.)

Recommendation III: Immediate Content Priorities

Interim health-related content instruction in the following high priority areas should begin in the Fall 1987.

1. Injury prevention
2. Substance abuse (especially utilizing the new Substance Abuse Curriculum)
3. Family Living (including sex education, but excluding school-based family planning services)
4. Communicable diseases (with emphasis on sexually-transmitted diseases, including AIDS)

Recommendation IV: Local Leadership

The State Department of Education and the Program Director of the Mississippi Comprehensive School Health Program should design and implement a major staff development thrust for administrators in the area of school health. This will enable them to provide local leadership for the implementation of sound, comprehensive, school health programs in their districts.

Recommendation V: Awareness and Planning

Establish a permanent, voluntary Health Education Curriculum Committee, serving under the auspices of the State Department of Education. The mission of this committee is to promote, encourage, review, update, and approve health education curriculum content. An additional mission of this committee would be to assist in the establishment of short-term and long-term funding for health education.

This permanent committee should include, at a minimum, representation from these areas:

1. Health Education
2. Mental Health Professionals
3. Physicians
4. Registered Nurses
5. Parent/Teacher Organizations
6. Clergy
7. School Administrators
8. Students
9. Public Health Professionals
10. Government Representation (local, state)
11. General Public

Recommendation VI: Community Involvement

Every local district should establish its own Local Health Education Council. At the very least, benefits from establishing these grassroots, community councils include (1) providing a forum for incor-

porating specific local human needs into the health curriculum of the local schools; and (2) providing a means to assure that comprehensive, meaningful health education in the local schools will achieve long-term community support.

Recommendation VII: Awareness and Support

The State Department of Education should initiate a public awareness and parent information campaign to emphasize the need for good health practices that will lend support to the newly formulated Comprehensive School Health Program.

Recommendation VIII: Financial Support

The State Department of Education should review, identify, and coordinate state and federal financial resources available to school districts to assist in the implementation of Comprehensive School Health Education, and disseminate information on available funds to school districts.

Long-Term Recommendations

Recommendation I

That the Mississippi Board of Education, utilizing the Program Director and staff of the Mississippi Comprehensive School Health Program, contract with recognized authorities in school health education and in school health services for the development and implementation of a Comprehensive School Health Program throughout the state. Current, existing, comprehensive K-12 health curricula should receive immediate review. The completion of the state curriculum guidelines for health education should become high priority so that the program is ready for implementation by Fall, 1990.

Recommendation II

A method of certifying professional health educators should be sought and approved. The State Board of Education should support certification criteria that insures that true professional health educators teach in our schools.

Recommendation III

The State Board of Education should begin negotiations with state educational institutions of higher learning to develop educational programs for the

"Rather than focusing on negative behaviors, this approach would provide school-age children and their families with the knowledge, skills, incentives, and support they need to make positive decisions in favor of healthy behaviors."

preparation of trained professional health educators to meet the need for the State school system.

Recommendation IV

The State Board of Education, utilizing the developed Comprehensive School Health Education Program, should submit requests for funding legislation sufficient to cover its costs.

Recommendation V

A Comprehensive School Health Education Program must include at least the following topics:

- A. Mental and Emotional Health (Self-Image)
 - 1. Personal well-being
 - 2. Social life
- B. Family Life
 - 1. The body
 - 2. Emotions
 - 3. Life cycle
 - 4. Relationships and responsibilities
 - 5. Decision-making
 - 6. Special needs (ethnic, habitational, parents)
- C. Substance use and abuse
- D. Nutrition
- E. Exercise
- F. Other
(Anatomy and physiology; personal hygiene; preventive health; communicable diseases; lifestyle diseases; consumer education; first aid; applied knowledge; environmental health; safety and injury prevention; and making health decisions)

Recommendation VI

Data collected on school health knowledge should be utilized in the development of the Comprehensive School Health Education Program.



The President Speaking

The Other Medical Profession

W. LAMAR WEEMS, M.D.
Jackson, Mississippi

"A nurse should do nothing but nurse. If you want a charwoman, hire one. Nursing is a specialty."

Florence Nightingale (1820-1910)

"Nurses are in much the same position as housemaids, and need little teaching beyond poultice-making and the enforcement of cleanliness and attention to the patient's wants."

*Unnamed physician-contemporary of
Florence Nightingale*

The U.S. Department of Health and Human Services predicts that there will be a shortage of 1.2 million registered nurses in the United States by the year 2000. In April 1987, an American Hospital Association survey revealed that 13.6% of all R.N. positions were unfilled. Freshmen enrollment in nursing programs is down 25% since 1982, and the National League of Nursing estimates that 60,000 will graduate in 1995 compared to 77,000 in 1986. A New York Times headline recently announced that "Sudden Nurse Shortage Threatens Hospital Care." Closer to home, the surgical intensive care unit in the University Hospital is currently operating below capacity, disrupting operating schedules and emergency care, because — you guessed it — they don't have enough nurses.

The brunt of the problem falls, for the time being, upon hospital administrators because hospitals are so dependent upon nursing services. Predictably, they will be looking for expedient solutions. My observation is that management people generally have a utilitarian view of the role of the nurse in the health care system. Professionalism is a concept which is sometimes a bit too nebulous for these pragmatic folks when there is work to be done and a limited budget to pay for it.

The pedestrian attitude toward the *vocation* of nursing is reinforced within the profession itself by the conflict over entry into practice requirements which focuses upon licensing laws rather than academic credentials. There is considerable opposition to requirement of a baccalaureate degree for licensure as a registered nurse which has been proposed by the American Nurses Association. Raising educational requirements, some say, would deny

(Continued on page 91)

EDITORIALS

JOURNAL OF THE
MISSISSIPPI STATE
MEDICAL ASSOCIATION

VOLUME XXIX, NUMBER 3
MARCH 1988

Coat of Many Colors

In the beginning we are exposed to only forms. There are whites, grays, and blacks. As we develop, then comes awareness of more varied shapes. Later comes color. This adds brightness and intent to our lives. As we mature, and as we travel and have more and more experiences, we develop an even better appreciation of colors. We have heard the many contemporary expressions related to color, such as, "blue mood," "purple with rage," "he's yellow," "green with envy," "black outlook on life," "lily white," and "true blue." Surely these and more indicate a relationship of our moods to colors.

God surely went to a lot of trouble to let us appreciate the beautiful colors of new green grass, autumn leaves, sky blue water and the varied colors of sunsets. Surely one has only to look at the splendor of a beautiful rainbow to have a heartfelt appreciation of the nearness of God.

In our day-to-day lives color television is a boon to our sometimes drab day-to-day lives. To relate colors better to our own lives we can compare our lives to psychedelic color machines that turn different colors with the type, intensity, or loudness of music. Our lives surely can be dull and drab if we do not have the appreciation of color and if we cannot put some vivacious color and spirit into our everyday living. Certainly a bright, enthusiastic person can mean more to God's kingdom than a sad and dull-spirited one; so let's all brighten up our lives a little in order to brighten up those lives around us, whether they are patients or co-workers. If we can't be a little bright, then at least let's be a little colorful.

Thank God I am a physician.

JOE JOHNSTON, M.D.
Associate Editor

Guest Editorial

Physician Support Sought For School Health Curriculum

Perhaps just as vital a part of education and subsequent economic development in Mississippi as anything else, is the general physical, mental, and emotional health of our school age children.

Rather quietly, over the past two years, activity and interest has been building in the area of comprehensive school health education. This enthusiasm has resulted in the publication of short-term and long-term recommendations for school health education. These guidelines received the full and unanimous endorsement by the lay board of education in September 1987.

The next step in the process to establish a health education curriculum will be to obtain funding for its implementation. Public and professional support for this endeavor will be needed. Intimately included in this process will be the involvement of a significant number of citizens in each school district. These individuals will be from every walk of life and profession.

It is our great hope that physician input at the local school district level and at the state health curriculum counsel level will be significant.

J. EDWARD HILL, M.D., Chairman
Health Curriculum Committee

(Ed. Note: The report of the State Health Curriculum Committee and its recommendations are published on page 78.)

LETTERS

"Polio-Plus"

Rotary International Foundation wants to thank the Mississippi State Medical Association House of

LETTERS/Continued

Delegates for passing a resolution at its 1987 annual session in support of Rotary International Foundation's "Polio-Plus" Program.

Luckily, polio, with its crippling effect and deaths, has been markedly decreased in the United States. However, worldwide one of every 200 children is crippled from polio.

The "Plus" in the program identifies five other preventable diseases — measles, tetanus, whooping cough, tuberculosis, and diphtheria.

Four million children die each year of these diseases that are preventable by vaccination. This is equal to a jumbo jet (carrying 375 children) crashing every hour of the year and killing every child. This should be a non-acceptable reality to us in the medical community.

In many undeveloped countries children are not even named until they are 2 years of age to see if they escape death from these preventable diseases.

Rotary, with its worldwide network reaching down to the small community levels can be a non-political instrument to effectively channel aid. It can spot the real needs and has the organization to direct and coordinate efficiency with no personal or selfish interests.

Rotary International has pledged to promote and assist polio immunizations worldwide in partnership with governments and international health agencies — World Health Organization (WHO), Pan-American Health Organization (PAHO), and United Nations International Children Fund (UNICEF) — by supplying the polio vaccinations.

Through these Associations, Rotary shares the goal of conquering not just polio but the five other targeted childhood diseases. The goal is to immunize all children of the world against polio by 1990 and rid the world of polio by 2005, the 100th anniversary of Rotary.

To accomplish this goal, Rotary has taken its experience from its 3H (Health, Hunger, Humanity) Program which has helped in such programs before. Rotary has established a Polio Plus task force and

44 national and multinational committees to raise \$120 million in donations and pledges by June 1988, the date of the Rotary International Convention in Philadelphia, Pennsylvania.

This is the first time Rotary International has gone outside of its own members to ask for funds for one of its programs.

Each local Rotary Club received a recommended fair share of the \$120 million goal, and most then pledged to raise much more than its fair share. These donations and pledges come from Rotary members, corporations, individuals, and special projects. They are strictly voluntary contributions.

Rotary International has been mandated to spend less than 10% of the funds for administration and expenses of the program.

Rotary can supply the oral polio vaccine (3 doses) to immunize a child for twelve cents (12¢).

For a \$1,000 donation, Rotary can immunize 8,000 children. Of these 8,000 children, 22 cases of the crippling disease of polio and 4 deaths can be prevented. We in Rotary feel that there can be nothing so self-satisfying or excitable obtained for one thousand dollars.

Additional benefits of a \$1,000 donation are that it is tax deductible and the donor may designate anyone of their choice to become a Rotary Paul Harris Fellow — an honorary fellowship. The designee may or may not be a Rotarian, and may be of any sex or race. Therefore it can be utilized as a memorial or as an honor tribute from parents to child, children to parent, employer to employee, employees to employer, or spouse to spouse.

With over 1 million members of Rotary in 22,250 Clubs in 161 countries or geographic areas, we feel the goal is certainly reachable and obtainable.

For more information, you may contact me at 1901 Mission 66, Vicksburg, MS 39180 or call (601) 636-2246.

CHESTER W. MASTERSON, M.D.

Vicksburg, MS

Co-Chairman, Polio-Plus Committee
Rotary District #682

120th Annual Session

June 15-19 in Biloxi

Plan now to attend!

COMMENT

Doctor Ignites Idea: License Smokers

By Joe Rogers

A Jackson doctor has a suggestion for resolving the matter of damage suits against tobacco companies.

There is such a case going on in Lexington right now. A Durant man's family is suing the American Tobacco Co. and a local cigarette distributor for \$17 million.

Their claim is that Pall Mall cigarettes caused the cancer that killed Nathan Horton last January. Horton smoked two packs a day for 35 years.

The tobacco company argues, among other things, that Horton was aware of the dangers of smoking and could have quit. A jury will determine the outcome.

But Kermit Till, a general practitioner, called to offer another plan to eliminate the need for that kind of debate in the future: Require smokers to have a license.

Till sees it as a sort of James Bond situation, only in reverse.

"Instead of a license to kill, they would have a license to be killed."

Before you decide Till is just blowing smoke, consider the possibilities. And forget the realities, such as a massive smoker revolt.

You might think lawyers would argue that such a proposal would not stand the test of the law, would be entirely illegal, unworkable, and all sorts of things.

But I just called one, and that is not what he said at all.

"Well, you can license anything as long as it's not a constitutional right," the lawyer said. "If the state deems it a privilege, not a right, then it could be licensed.

"My gut reaction is they could very well deem it a privilege."

So much for the legal argument.

As a practical matter, Till suggests that anyone applying for a license would have to be 21. That makes sense. After all, anyone choosing to kill himself with alcohol must meet the same age requirement in most states.

(Of course this introduction of the alcohol theme

raises the possibility of a license for drinking, too, but one thing at a time, please.)

If the applicant qualifies by age, he or she would then have to complete a series of steps before making the final grade.

"They could have a debriefing school, where people went to review all the patients who had lung cancer and see how they looked," Till said.

"You could put people through a series of classes to make sure they understood what they were doing."

Of course you could argue that people already should know that, what with the warnings printed right there on the packs. For example, here is what you can read on Camel Lights:

Surgeon General's Warning: Smoking causes lung cancer, heart disease, emphysema, and may complicate pregnancy.

You would think that would be sufficient warning, that anyone choosing to ignore that plainly worded caveat deserves his or her fate.

Certainly novelist Kurt Vonnegut — who, as Horton did, favors the unfiltered Pall Malls — recognizes what he is doing to himself. His writing is littered with references to his slow suicide.

But you must realize not everyone can read.

And the tobacco companies spend lots of advertising dollars to convince people that smoking is chic, fashionable or macho. At least alcoholic beverage producers air an occasional reminder that people should drink responsibly.

When's the last time a tobacco company urged anyone to smoke responsibly?

That is not to say the American Tobacco Co. should or should not prevail in this matter in Lexington. But you probably have your own opinion on the subject.

Till does.

"I hope they lose," he said. "I would like to see cigarettes done away with, personally."

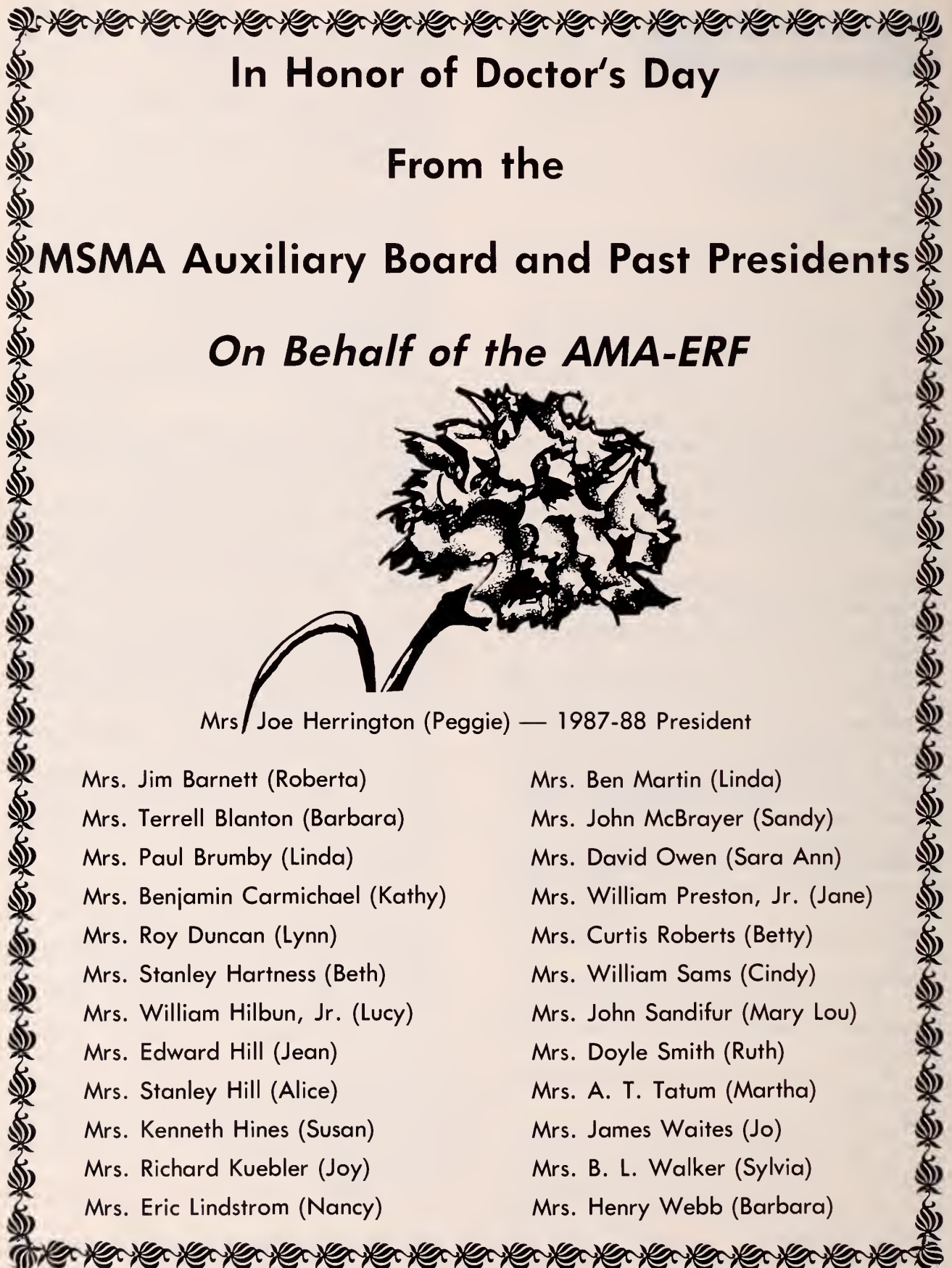
Meanwhile the license is what you might consider a temporary solution. And of course there is the question of what form the license should take.

I would suggest the plastic-coated variety with a picture for identification, not unlike a driver's license. The picture would also cut down on the number of people using borrowed licenses to buy smokes.

As for the insignia, well, that should come pretty naturally. I think the perfect stamp would be the same logo flown by Errol Flynn in his wonderful *Captain Blood*.

You remember that: the skull and crossbones.

(Ed. Note: Reprinted from the *Clarion-Ledger*, January 21, 1988, with permission.)



In Honor of Doctor's Day

From the

MSMA Auxiliary Board and Past Presidents

On Behalf of the AMA-ERF



Mrs. Joe Herrington (Peggie) — 1987-88 President

Mrs. Jim Barnett (Roberta)
Mrs. Terrell Blanton (Barbara)
Mrs. Paul Brumby (Linda)
Mrs. Benjamin Carmichael (Kathy)
Mrs. Roy Duncan (Lynn)
Mrs. Stanley Hartness (Beth)
Mrs. William Hilbun, Jr. (Lucy)
Mrs. Edward Hill (Jean)
Mrs. Stanley Hill (Alice)
Mrs. Kenneth Hines (Susan)
Mrs. Richard Kuebler (Joy)
Mrs. Eric Lindstrom (Nancy)

Mrs. Ben Martin (Linda)
Mrs. John McBrayer (Sandy)
Mrs. David Owen (Sara Ann)
Mrs. William Preston, Jr. (Jane)
Mrs. Curtis Roberts (Betty)
Mrs. William Sams (Cindy)
Mrs. John Sandifur (Mary Lou)
Mrs. Doyle Smith (Ruth)
Mrs. A. T. Tatum (Martha)
Mrs. James Waites (Jo)
Mrs. B. L. Walker (Sylvia)
Mrs. Henry Webb (Barbara)

MEDICAL ORGANIZATION

Council Announces Plans For 120th Annual Session

Plans for MSMA's 120th Annual Session are nearly complete, and members will be receiving more detailed information in the weeks to come. The Annual Session is scheduled for June 15-19 at the Royal d'Iberville Hotel in Biloxi.

Scientific programming will have a new format this year. Following action by the Council on Scientific Assembly, which is charged with coordinating Annual Session plans, the Surgery Plenary Session and the Medicine Plenary Session will both be conducted on Friday, June 17. The Surgery Plenary Session will be held that morning and the Medicine Plenary Session will take place in the afternoon.

Another schedule change by the Council calls for the Hospital Medical Staff Section to meet on Saturday morning, following the annual meeting of the

MSMA Young Physicians Section. In previous years the Hospital Medical Staff Section has conducted its meeting on Wednesday afternoon.

Highlighting the MSMA/MSMA Auxiliary Membership Banquet on Friday night will be an appearance by Mark Shields, nationally syndicated columnist and television political commentator who combines wit and wisdom in his entertaining and thought-provoking presentations.

As in past years, the Annual Session will also feature medical alumni reunions, specialty society meetings, technical and scientific exhibits, House of Delegates sessions and a number of fellowship events. The MSMA Auxiliary also will conduct its annual meeting during the week, as will the Mississippi Foundation for Medical Care and Medical Assurance Company of Mississippi.

MSMA members are urged to make plans now to attend. More information will be published in future issues of the *Journal MSMA* and the "MSMA Blue Sheet."

Preliminary Schedule 120th Annual Session

Wednesday, June 15

President's Reception

Thursday, June 16

House of Delegates

Medical Assurance Company

Miss. Foundation for Medical Care

MSMA Member/Exhibitor Reception

Medical Alumni Receptions

Friday, June 17

Surgery Plenary Session

Medicine Plenary Session

MSMA Auxiliary Annual Meeting

Specialty Society Meetings

MSMA/MSMA Auxiliary Membership Banquet

Saturday, June 18

Hospital Medical Staff Section

Young Physicians Section

Specialty Society Meetings

Golf, Tennis, Fishing

Sunday, June 19

Church Services/House of Delegates

MSMA Auxiliary Supports Children's Cancer Clinic



Mrs. Kenneth (Susan) Hines of Greenwood, center, health projects chairman for the Mississippi State Medical Association Auxiliary, presents a check to Nancy Studdard, co-chairman of the Junior League of Jackson's fundraising campaign for the Mississippi Children's Cancer Clinic at the University of Mississippi Medical Center in Jackson. Dr. Norman Nelson, right, is UMC vice chancellor for health affairs.

State Urological Society Contributes to UMC Fund



The Mississippi Urological Association contributed \$10,000 to the visiting professors' fund of the Division of Urology in the Department of Surgery at the University of Mississippi Medical Center. Dr. Woodie L. Mason, of Jackson, center, secretary/treasurer of the specialty society, made the presentation to Dr. Norman Nelson, right, UMC vice chancellor, and Dr. Lamar Weems, left, director of the urology division and MSMA president.

PRINTING — OFFICE SUPPLIES

EQUIPMENT — FURNITURE



Premier Printing Company

2485 West Capitol

Jackson, Mississippi

Phone 352-4091



Doctor,

Have you ever looked for a different way to say "Thank You," "Congratulations," or "Get Well Soon"?

All of these messages are available, along with memorial tributes, in greeting cards from the MSMA Auxiliary. Each card signifies your donation to the AMA-ERF in the name of a friend or colleague.

For information about AMA-ERF greeting cards for year-round use, contact a member of your local MSMA Auxiliary, or Kathy Carmichael, 106 Colonial Place, Hattiesburg, MS 39401; telephone 268-9642.

Medico-Legal Brief

Physicians, Hospitals in Illinois May Be Sued for Wrongful Birth

Parents of a child born with hemophilia could maintain a cause of action for wrongful birth, the Illinois Supreme Court ruled.

A pregnant woman who had two cousins who had suffered from hemophilia sought genetic counseling from a hospital. The director of the department of genetics advised her of the availability of prenatal genetic diagnostic tests to determine whether the child she was carrying suffered from hemophilia. The physician then referred her to another hospital, where a physician gave her similar information on genetic diagnostic testing. The physician also promised to check on whether her cousins were registered hemophiliacs and to examine their death certificates.

Two weeks later the second physician sent a letter to the first physician giving his opinion that the risk of the patient being a carrier of classic hemophilia was very low. The physician then sent a copy of that letter to the patient. Based upon that information, the parents exercised a conscious choice to proceed with the pregnancy. An infant son was born on October 17, 1980, and after a bleeding episode, was diagnosed as a hemophiliac of the B type.

In an action against the two physicians and two hospitals, a trial court denied motions to dismiss. An appellate court ruled that the child had a cause of action for extraordinary medical expenses expected to be incurred during the age of majority; the parents had a cause of action for extraordinary medical expenses of their child during his minority; and the parents had no cause of action for emotional distress.

On appeal the Illinois Supreme Court said that the child had no cause of action for wrongful life. The court agreed with the majority of courts that the alleged negligence of the hospitals and physicians did not give rise to an injury recognized at law. The alleged injury suffered by the child was birth, which the court refused to recognize as an injury. In addition, the court said that to recognize that the child had a fundamental right not to be born would undermine the legislative policy favoring childbirth over abortion.

The court said that the great weight of authority forces it to hold that an action for wrongful birth may be maintained by the parents of a genetically or congenitally defective child. They could recover damages for the extraordinary expenses — medical,

hospital, institutional, educational and otherwise — necessary to manage and treat the child's hemophilia.

Finally, the court said that the parents had no cause of action for emotional distress. The alleged negligence in no way endangered the parents, and they suffered no physical injury or illness from the emotional distress allegedly caused by the negligence. — *Siemieniec v. Lutheran General Hospital*, 512 N.E.2d 691 (Ill. Sup. Ct., Aug. 17, 1987)

PRESIDENTS PAGE

(Continued from page 78)

opportunities to underprivileged people and would aggravate the nursing shortage, especially in small hospitals. This line of reasoning should sound familiar to physicians who have witnessed, in response to a perceived shortage of doctors a while back, waiver of educational requirements for foreign medical graduates and the proliferation of all sorts of "physician extenders" and physician substitutes such as physicians' assistants and nurse practitioners.

Nurses have been struggling since the days of Florence Nightingale to gain true professional status. While many physicians as individuals have been disdainful of the effort, organized medicine has been supportive for the most part. Report CC of the AMA Board of Trustees (Interim Meeting, December 1987), summarizes the position of the AMA on Nursing Education and the Supply of Nursing Personnel and provides an excellent bibliography for anyone who wishes to become better informed about the role of AMA in development of nursing policies. Actually, the American Nurses Association has been cool to any patronizing involvement in nursing issues by organized medicine, feeling, it seems, that nurses, and not physicians, should define the scope of nursing practice and set educational standards and licensing requirements. However, the predicament of the field of nursing today suggests that organized nursing ought to be trying to cultivate stronger organizational alliances rather than to be so defensive about outside interference. With nursing issues making front page news, now is an opportune time for nurses to make political gains on all fronts.

Nursing is uniquely handicapped in the effort to achieve professional status compared to most other professions in that so few of their members are self

employed and financially independent in their professional practice. Most nurses are employees of hospitals and clinics. In addition, the fact that most nurses are women may have deprived the profession of some clout in a male dominated health care system. A certain degree of independence is required for professionals to function professionally; a requirement which is incompatible with servility. Physicians, by the way, should take note of this additional lesson from the nursing experience because the ranks of employed physicians are growing rapidly. Of course, employees aren't bound to be powerless just because they work for someone else if they have the gumption to take advantage of collective bargaining. Somehow, nursing leadership has failed to grasp the full significance of this important potential source of power. With the present shortage of nurses, there now exists an unusual opportunity to upgrade the profession in all parameters, including pay scales, competence, and morale, through enlightened union activity.

If nursing leaders do figure out ways to increase the influence of nurses, those same leaders will, in my opinion, next need to reevaluate the values and priorities which guide their policies. While paying homage to Florence Nightingale, nursing has grown increasingly disaffected with the example she set;

an example of personal involvement in the squalor, hard work, and emotional stress inevitably encountered at the bedside of sick people. As Report CC states, "There is some evidence that increasing the level of education of nurses provides options that remove them from the bedside." A sad commentary. Instead of trying to ennoble and aggrandize the traditional role of nurses who care for patients, organized nursing has hypocritically abandoned much of its heritage and its own major constituency. For example, in exalting careers in nursing administration and in embracing the concept of nurse practitioners as a way to advance the profession by aping doctors, nursing leadership has participated, by neglect, in demeaning the importance of the bedside nurse.

No need to belabor this point. The health care system, in order to function effectively, must have well educated, intelligent, highly motivated nurses taking care of patients. They need to be professionals in every sense of the word. Given this status and appropriate compensation, the nursing shortage will rapidly disappear. To paraphrase Miss Nightingale, "A nurse should do nothing but nurse. If you want a pencil pusher, hire one. Nursing is a specialty." Personally, I admire Florence Nightingale. She ought to be promoted.

"A Sign of the Times!"



SALES — SERVICE — LEASING

HARRELD CHEVY-OLDS

354-2233

POSTGRADUATE CALENDAR

April

SPRING SONIC SYMPOSIUM

April 9

Natchez Eola Hotel, Natchez

1988 MISSISSIPPI OPHTHALMIC SPRING MEETING

SURGICAL TREATMENT OF CORNEA AND ANTERIOR SEGMENT PROBLEMS

April 9-10

Holiday Inn Downtown, Jackson

DIAGNOSIS AND TREATMENT OF INFECTIONS IN DIABETES MELLITUS

April 27-30

Ramada Renaissance Hotel, Jackson

FAMILY PRACTICE UPDATE

April 27-30

Ramada Renaissance Hotel, Jackson

OBSTETRICS-NEWBORN UPDATE

April 27-28

Broadwater Beach Hotel, Biloxi

MISSISSIPPI PERINATAL ASSOCIATION ANNUAL MEETING

April 29

Broadwater Beach Hotel, Biloxi

May

RENAL UPDATE

May 5-7

Ramada Inn Coliseum, Jackson

ADVANCE TRAUMA LIFE SUPPORT PROVIDER COURSE

May 19-20

University Medical Center

MISSISSIPPI NEUROLOGICAL SOCIETY ANNUAL MEETING

June 10-11

Ramada Renaissance Hotel, Jackson

For more information or a program brochure, contact the University of Mississippi Medical Center Division of Continuing Health Professional Education, 2500 North State Street, Jackson, Mississippi 39216-4505; or call (601) 984-1300.

Review A Book

Members of MSMA interested in reviewing any of these volumes should address requests to Editor, JOURNAL MSMA. After submitting a review for publication, you may keep the book for your personal library.

Neurology: Problems in Primary Care. James L. Bernat, M.D. and Frederick M. Vincent, M.D. Oradell, New Jersey: Medical Economics Books, 1987.

Neuroanatomy: An Atlas of Structures, Sections and Systems.

Duane E. Haines, Ph.D. Baltimore, Maryland: Urban & Schwarzenberg, 1987. \$22.50.

Payment in Full: A Guide to Successful Bill Collecting.

Leonard Bendell. Gainesville, Florida: Triad Publishing. 1987. \$24.95.



**We earn
your trust every day.™**



Trustmark™
National Bank

Jackson/Bogue Chitto/Brookhaven/Canton/Clinton/Columbia
Georgetown/Gloster/Greenville/Greenwood/Hattiesburg/Hazlehurst
Leand/Liberty/Madison/Magee/McComb/Pearl/Petal/Ridgeland
Tylertown/Vicksburg

Member FDIC

Counsel to Authors

THE JOURNAL welcomes manuscripts which should be submitted to the Editors at 735 Riverside Drive, Jackson, MS 39216, in original and at least one duplicate copy. They must be typewritten double spaced on 8½ by 11-inch white paper. **Brief manuscripts (about 2,500 words or 8 pages) will be given preference over longer articles.**

The author is responsible for all statements made in his work, including changes made by the manuscript editor. Manuscripts are received with the understanding that they are not under simultaneous consideration by any other publication and have not been previously published. All manuscripts will be acknowledged, and while those rejected are generally returned to the author, the JOURNAL is not responsible in event of loss. Manuscripts accepted for publication become the property of the JOURNAL and are copyrighted by the association when published. They may not be published elsewhere without written release and permission from both the JOURNAL and the author.

All copy must be double spaced, including legends, footnotes, and references. Generous margins at the top, bottom, and on both sides of the page should be allowed. Each page after the title page should be consecutively numbered and carry a running head identifying the paper and author.

Titles should be short, specific, and clear. Ordinarily, a title should not exceed 80 characters, including punctuation.

References should be limited to a maximum of 10. If there are more than 10, the references will be omitted and a notation made to write the author for a complete list. Textbooks, personal communications, and unpublished data may not be cited as references. References must include names of authors, complete title cited, name of journal or book spelled out or abbreviated according to the *Index Medicus*, volume number, first and last page numbers, month, date (if published more frequently than monthly), and year. References should be arranged according to order listed in the text and must be numbered consecutively.

Manuscripts accepted for publication are subject to copy editing. Authors will receive galley proof prior to publication. Galley proof is only for correction of errors, and text changes

may not be made. The galley proof should be returned by the author within 48 hours from receipt, and no further changes may be made.

Illustrations consist of all material which cannot be set into type such as photographs, line drawings, graphs, charts, and tracings. Illustrations should be submitted separately from text copy. Figures and drawings should be professionally prepared with black ink on white paper. Photographs should be of high resolution, unmounted, untrimmed, glossy prints. Each must be clearly identified. No charges are made to authors for up to four illustration engravings. More are not permitted unless voted on by two editors and extra costs must be absorbed by the author.

Illustrations must be numbered and cited in the text. Legends, not exceeding 40 words and preferably shorter, must accompany each illustration, typed double spaced on separate sheets. The following information should appear on a gummed label affixed to the back of each illustration: Figure number, manuscript title, author's name, and arrow indicating top of the illustration.

In photographs in which there is any possibility of personal identification, an acceptable legal release must accompany the material.

A thesis summary of 75 to 100 words must accompany each manuscript.

Reprints may be obtained at cost plus shipping charges from the association and **should be ordered prior to publication.** The JOURNAL reserves the right to decline any manuscript. Authors should avoid placing subheads in the text, and the Editors reserve the prerogative of writing and inserting subheads according to JOURNAL style. — *The Editors.*

In addition, in view of *The Copyright Revision Act of 1976*, effective Jan. 1, 1978, transmittal letters to the editor should contain the following language: "In consideration of the Mississippi State Medical Association's taking action in reviewing and editing my submission, the author(s) undersigned hereby transfers, assigns, or otherwise conveys all copyright ownership to the MSMA in the event that such work is published by the MSMA." We regret that transmittal letters not containing the foregoing language signed by all authors of the submission will necessitate delay in review of the manuscript. — *The Editors.*

NEW MEMBERS

BAUMGARTNER, ERIC T., Tupelo. Born New Orleans, Dec. 3, 1955; M.D., Louisiana State University School of Medicine, New Orleans, 1981; interned and pediatric residency, University of Arkansas Medical School, Little Rock, 1981-84; elected by Northeast Mississippi Medical Society.

BENEFIELD, BOYD P., Gulfport. Born New Orleans, May 31, 1956; M.D., Tulane University School of Medicine, New Orleans, 1984; interned and medicine residency, University of South Alabama Medical Center, Mobile, 1984-87; elected by Coast Counties Medical Society.

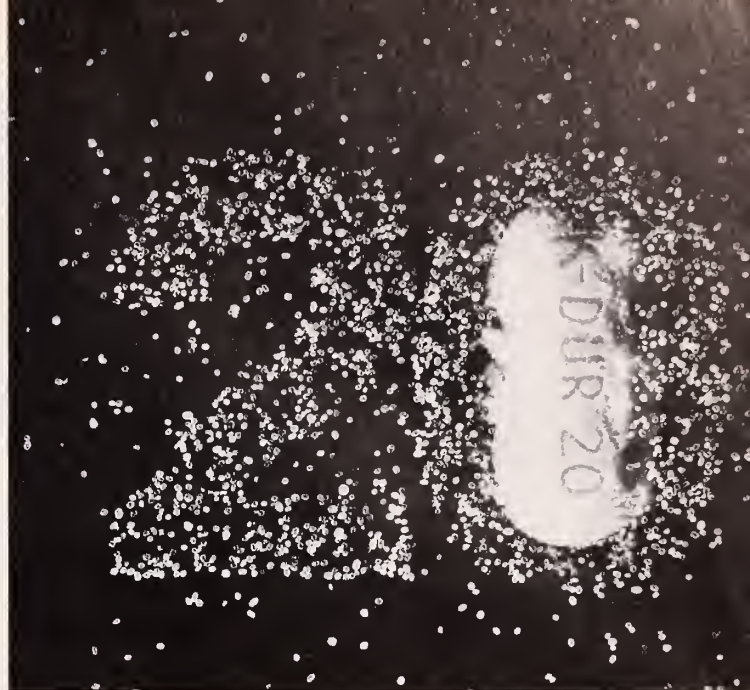
BRANCH, WALTER D., JR., Jackson. Born Bessemer, AL, April 29, 1954; M.D., Medical College of South Carolina, Charleston, 1979; interned and general surgery residency, Pontiac General Hospital, Pontiac, MI 1979-85; vascular surgery residency, Arizona Heart Institute, 1985-86; elected by Central Medical Society.

HOLZHAUER, JAMES L., West Point. Born DeWitt, AR, Oct. 27, 1949; M.D., University of Arkansas for Medical Science, Little Rock, 1981; one year internship, University of Arkansas Medical Center, Little Rock; ob-gyn residency, University of Tennessee, Memphis, 1982-86; elected by Prairie Medical Society.

NICHOLAS, LAWRENCE MICHAEL, Meridian. Born Yazoo City, June 13, 1943; M.D., Tulane University School of Medicine, New Orleans, 1968; one year internship, Baptist Memorial Hospital, Memphis, TN; general surgery residency, University of Alabama, Birmingham, 1969-73; cardiovascular surgery residency, University of Tennessee, Memphis, 1978-80; elected by East Mississippi Medical Society.

RICE, PAUL MATTHEW, Jackson. Born Gary, IN, May 18, 1956; M.D., Meharry Medical College, Nashville, TN, 1983; interned and ob-gyn residency, Meharry Medical College, Nashville, 1983-87; elected by Central Medical Society.

RINZLER, GARY SCOTT, Jackson. Born Paterson, NJ, May 17, 1957; M.D., John A. Burns School of Medicine, University of Hawaii, Honolulu, 1984; interned and physical medicine and rehabilitation, New England Medical Center, Boston, 1984-87; elected by Central Medical Society.



Most patients need only one.

K-DUR™ 20 Microburst
Release
System™
(potassium chloride) 20mEq Sustained Release
Tablets

**A daily prophylactic dose
in a single tablet.**

Please see next page for brief summary of prescribing information.

KEY Key Pharmaceuticals, Inc.
Kenilworth, NJ 07033
World leader in drug delivery systems.

K-DURTM Microburst Release SystemSM (potassium chloride) Sustained Release Tablets

INDICATIONS AND USAGE: BECAUSE OF REPORTS OF INTESTINAL AND GASTRIC ULCERATION AND BLEEDING WITH SLOW-RELEASE POTASSIUM CHLORIDE PREPARATIONS, THESE DRUGS SHOULD BE RESERVED FOR THOSE PATIENTS WHO CANNOT TOLERATE OR REFUSE TO TAKE LIQUID OR EFFERVESCENT POTASSIUM PREPARATIONS OR FOR PATIENTS IN WHOM THERE IS A PROBLEM OF COMPLIANCE WITH THESE PREPARATIONS.

1. For therapeutic use in patients with hypokalemia with or without metabolic alkalosis, in digitalis intoxication and in patients with hypokalemic familial periodic paralysis.

2. For the prevention of potassium depletion when the dietary intake is inadequate in the following conditions: Patients receiving digitalis and diuretics for congestive heart failure, hepatic cirrhosis with ascites, states of aldosterone excess with normal renal function, potassium-losing nephropathy, and with certain diarrheal states.

3. The use of potassium salts in patients receiving diuretics for uncomplicated essential hypertension is often unnecessary when such patients have a normal dietary pattern. Serum potassium should be checked periodically, however, and if hypokalemia occurs, dietary supplementation with potassium-containing foods may be adequate to control milder cases. In more severe cases supplementation with potassium salts may be indicated.

CONTRAINDICATIONS: Potassium supplements are contraindicated in patients with hyperkalemia since a further increase in serum potassium concentration in such patients can produce cardiac arrest. Hyperkalemia may complicate any of the following conditions: Chronic renal failure, systemic acidosis such as diabetic acidosis, acute dehydration, extensive tissue breakdown as in severe burns, adrenal insufficiency, or the administration of a potassium-sparing diuretic (e.g., spironolactone, triamterene).

Wax-matrix potassium chloride preparations have produced esophageal ulceration in certain cardiac patients with esophageal compression due to enlarged left atrium.

All solid dosage forms of potassium chloride supplements are contraindicated in any patient in whom there is cause for arrest or delay in tablet passage through the gastrointestinal tract. In these instances, potassium supplementation should be with a liquid preparation.

WARNINGS: Hyperkalemia—In patients with impaired mechanisms for excreting potassium, the administration of potassium salts can produce hyperkalemia and cardiac arrest. This occurs most commonly in patients given potassium by the intravenous route but may also occur in patients given potassium orally. Potentially fatal hyperkalemia can develop rapidly and be asymptomatic. The use of potassium salts in patients with chronic renal disease, or any other condition which impairs potassium excretion, requires particularly careful monitoring of the serum potassium concentration and appropriate dosage adjustment.

Interaction with Potassium-Sparing Diuretics—Hypokalemia should not be treated by the concomitant administration of potassium salts and a potassium-sparing diuretic (e.g., spironolactone or triamterene) since the simultaneous administration of these agents can produce severe hyperkalemia.

Gastrointestinal Lesions—Potassium chloride tablets have produced stenotic and/or ulcerative lesions of the small bowel and deaths. These lesions are caused by a high localized concentration of potassium ion in the region of a rapidly dissolving tablet, which injures the bowel wall and thereby produces obstruction, hemorrhage or perforation.

K-DUR tablets contain micro-crystalloids which disperse upon disintegration of the tablet. These micro-crystalloids are formulated to provide a controlled release of potassium chloride. The dispersibility of the micro-crystalloids and the controlled release of ions from them are intended to minimize the possibility of a high local concentration near the gastrointestinal mucosa and the ability of the KCl to cause stenosis or ulceration. Other means of accomplishing this (e.g., incorporation of potassium chloride into a wax matrix) have reduced the frequency of such lesions to less than one per 100,000 patient years (compared to 40-50 per 100,000 patient years with enteric-coated potassium chloride) but have not eliminated them. The frequency of GI lesions with K-DUR tablets is, at present, unknown. K-DUR tablets should be discontinued immediately and the possibility of bowel obstruction or perforation considered if severe vomiting, abdominal pain, distention, or gastrointestinal bleeding occurs.

Metabolic Acidosis—Hypokalemia in patients with metabolic acidosis should be treated with an alkalinizing potassium salt such as potassium bicarbonate, potassium citrate, potassium acetate, or potassium gluconate.

PRECAUTIONS: The diagnosis of potassium depletion is ordinarily made by demonstrating hypokalemia in a patient with a clinical history suggesting some cause for potassium depletion. In interpreting the serum potassium level, the physician should bear in mind that acute alkalosis per se can produce hypokalemia in the absence of a deficit in total body potassium while acute acidosis per se can increase the serum potassium concentration into the normal range even in the presence of a reduced total body potassium. The treatment of potassium depletion, particularly in the presence of cardiac disease, renal disease, or acidosis requires careful attention to acid-base balance and appropriate monitoring of serum electrolytes, the electrocardiogram, and the clinical status of the patient.

Laboratory Tests: Regular serum potassium determinations are recommended. In addition, during the treatment of potassium depletion, careful attention should be paid to acid-base balance, other serum electrolyte levels, the electrocardiogram, and the clinical status of the patient, particularly in the presence of cardiac disease, renal disease, or acidosis.

Drug Interactions: Potassium-sparing diuretics; see **WARNINGS**.

Carcinogenesis, Mutagenesis, Impairment of Fertility: Long-term carcinogenicity studies in animals have not been performed.

Pregnancy Category C: Animal reproduction studies have not been conducted with K-DUR. It is also not known whether K-DUR can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. K-DUR should be given to a pregnant woman only if clearly needed.

Nursing Mothers: The normal potassium ion content of human milk is about 13 mEq per liter. Since oral potassium becomes part of the body potassium pool, so long as body potassium is not excessive, the contribution of potassium chloride supplementation should have little or no effect on the level in human milk.

Pediatric Use: Safety and effectiveness in children have not been established.

ADVERSE REACTIONS: One of the most severe adverse effects is hyperkalemia (see **CONTRAINDICATIONS**, **WARNINGS**, and **OVERDOSAGE**). There have also been reports of upper and lower gastrointestinal conditions including obstruction, bleeding, ulceration, and perforation (see **CONTRAINDICATIONS** and **WARNINGS**); other factors known to be associated with such conditions were present in many of these patients.

The most common adverse reactions to oral potassium salts are nausea, vomiting, abdominal discomfort, and diarrhea. These symptoms are due to irritation of the gastrointestinal tract and are best managed by taking the dose with meals or reducing the dose.

Skin rash has been reported rarely.

OVERDOSAGE: The administration of oral potassium salts to persons with normal excretory mechanisms for potassium rarely causes serious hyperkalemia. However, if excretory mechanisms are impaired or if potassium is administered too rapidly intravenously, potentially fatal hyperkalemia can result (see **CONTRAINDICATIONS** and **WARNINGS**). It is important to recognize that hyperkalemia is usually asymptomatic and may be manifested only by an increased serum potassium concentration and characteristic electrocardiographic changes (peaking of T-waves, loss of P-waves, depression of S-T segment, and prolongation of the QT-interval). Late manifestations include muscle-paralysis and cardiovascular collapse from cardiac arrest.

Treatment measures for hyperkalemia include the following:

1. Elimination of foods and medications containing potassium and of potassium-sparing diuretics.
2. Intravenous administration of 300 to 500 ml/hr of 10% dextrose solution containing 10-20 units of insulin per 1,000 ml.

3. Correction of acidosis, if present, with intravenous sodium bicarbonate.

4. Use of exchange resins, hemodialysis, or peritoneal dialysis.

In treating hyperkalemia, it should be recalled that in patients who have been stabilized on digitalis, too rapid a lowering of the serum potassium concentration can produce digitalis toxicity.

NEW MEMBERS/Continued

ROSE, ETHEL S., Meridian. Born Rosedale, MS, Jan. 17, 1948; M.D., University of Mississippi School of Medicine, Jackson, 1981; interned and medicine residency and fellowship in neurology, Ochsner Medical Foundation Hospital, New Orleans, 1981-87; elected by East Mississippi Medical Society.

SULLIVAN, DAVID MARK, Jackson. Born Jackson, MS, May 28, 1958; M.D., University of Mississippi School of Medicine, Jackson, 1984; interned and internal medicine residency, University Medical Center, Jackson, 1984-87; elected by Central Medical Society.

TARVER, ROBERT SIDNEY, Jackson. Born Memphis, TN, Nov. 18, 1951; M.D., University of Mississippi School of Medicine, Jackson, 1978; interned and general surgery residency, University Medical Center, Jackson, 1978-84; elected by Central Medical Society.

ZACHOW, STEVEN E., Jackson. Born Kansas City, MO, July 2, 1956; M.D., University of Alabama School of Medicine, Birmingham, 1982; interned Lloyd Noland Foundation, Fairfield, AL, one year; radiation oncology residency, Medical College of Virginia, Richmond, 1983-87; elected by Central Medical Society.

— Next Month in *Journal MSMA* —

- "Cancer Prevention — National Directions, Local Realities"
- "Herpes Simplex Encephalitis: CT Findings"
- "Treatment of Primary Dysmenorrhea with Flurbiprofen"
- "Meet Your MSMA Staff"



**Recommended for
MSMA Members**

Disability Income Protection \$30,000*

Tax Free Each Year When You Are Disabled

- **Broad Disability Definitions.**
- **Residual Disability Benefits** paid when you continue to suffer income loss upon return to work.
- **Inflation Protection Rider** helps replace buying power of your benefit lost to inflation.
- **Choice of Benefit Period.**
- **Choice of Waiting Period.**
- **Underwritten by **INA****

... Founded in 1792, Insurance Company of North America is one of the oldest and strongest insurance companies in the United States.

* Based on \$2,500 Monthly Benefits

Insurance With Innovation

For Complete Information Contact:

Thomas Yates & Co.

GROUP INSURANCE ADMINISTRATORS

P.O. Box 5048 • Suite 365 Woodland Hills Building • 3000 Old Canton Road • Jackson, MS 39216
(601) 366-2406

PERSONALS

GEORGE E. ABRAHAM of Vicksburg was speaker at a recent seminar on "Understanding your Cholesterol and Triglyceride Levels."

ORLANDO ANDY of UMC presented papers at New York meetings of the Eastern Association of Electroencephalographers, Inc. and the Association for Research in Nervous and Mental Diseases.

TED BLANTON of Brandon presented talks on AIDS at First Baptist Church in Brandon and at Broadmeadow United Methodist Church in Jackson.

GERALDINE B. CHANEY of Jackson announces the establishment of her office for the practice of pediatrics and adolescent medicine in association with HELEN B. BARNES at 2915 North State Street.

RICHARD A. CONN of Hattiesburg announces the formation of The Southern Center for Arthritis Surgery in Hattiesburg.

J. ED HILL of Hollandale conducted an educational workshop on AIDS with high school staff and students.

RICHARD S. HOLLIS of Amory recently was honored as the 1987 Outstanding Clinical Professor of the South Central District of the American College of Obstetricians and Gynecologists.

JOSEPH E. JOHNSTON of Mount Olive recently was named runner-up for the 1987-88 Family Doctor of the Year Award by the American Academy of Family Physicians.

HERBERT LANGFORD of UMC made a presentation at the U.S.-Japanese Symposium in Cardiovascular Diseases in Anaheim, California.

EDWARD M. LOWICKI of Jackson became the first surgeon in Mississippi to be certified by the American Board of Laser Surgery recently when he passed certification examinations given at the University of California in San Francisco.

JAMES MARTIN of UMC presented a workshop in Biloxi for the perinatal outreach program.

PHYLLIS E. MASON announces the opening of her practice of radiology at Oktibbeha County Hospital in Starkville.

ELDON L. MCCLAIN of Biloxi has been reelected to a third term as chief of staff at Biloxi Regional Medical Center.

LUIS F. MOSQUERA has joined the medical staff at King's Daughters Hospital in Yazoo City for the practice of general surgery and surgical oncology.

SESHADRI RAJU of UMC was invited to speak at the Uruguayan Congress of Surgery in Montevideo, Uruguay, recently.

JAMES H. SAMS of Columbus announces the association of ROBERT P. CARRELL for the practice of anesthesiology.

HENRY J. SANDERS of McComb is General Campaign Chairman for Congressman Wayne Dowdy's campaign for the U. S. Senate. Dr. Sanders has served as chairman for each of Dowdy's four successful campaigns for Congress.

KENNETH W. STUBBS of Natchez has been named to the advisory council of Britton & Koontz First National Bank of Natchez.

TATE THIGPEN of UMC spoke at the Third International Symposium on Gynecologic Oncology, Surgery and Urology at the Nihon University School of Medicine in Tokyo, Japan.

Does Your Office Use ENVELOPES?

5000 for \$99⁹⁵

(#10 Reg. Add 10%
for Window Envelopes)

Up to four lines printed in upper left corner.
Packed 500 per box. Price includes your imprint
in black or standard red, blue or green ink.

Mississippi Residents add 6% Sales Tax

All **Prepaid Orders** will be shipped on our
trucks or UPS at no additional charge

Mail or Phone Orders To:

Northtowne Printers

3909 Northview Dr.

Jackson, MS 39206

(601) 981-2675

Before prescribing, see complete prescribing information in SK&F LAB CO. literature or PDR. The following is a brief summary.

Contraindications: There are no known contraindications to the use of 'Tagamet'.

Precautions: While a weak antilindrogenic effect has been demonstrated in animals, 'Tagamet' has been shown to have no effect on spermatogenesis, sperm count, motility, morphology or in vitro fertilizing capacity in humans.

In a 24-month toxicity study in rats at dose levels approximately 9 to 56 times the recommended human dose, benign Leydig cell tumors were seen. These were common in both the treated and control groups, and the incidence became significantly higher only in the aged rats receiving 'Tagamet'.

Rare instances of cardiac arrhythmias and hypotension have been reported following the rapid administration of 'Tagamet' HCl (brand of cimetidine hydrochloride) injection by intravenous bolus.

Symptomatic response to 'Tagamet' therapy does not preclude the presence of a gastric malignancy. There have been rare reports of transient healing of gastric ulcers despite subsequently documented malignancy.

Reversible confusional states have been reported on occasion, predominantly in severely ill patients.

'Tagamet' has been reported to reduce the hepatic metabolism of warfarin-type anticoagulants, phenytoin, propranolol, chlorthalidone, diazepam, lidocaine, theophylline and metronidazole. Clinically significant effects have been reported with the warfarin anticoagulants; therefore, close monitoring of prothrombin time is recommended, and adjustment of the anticoagulant dose may be necessary when 'Tagamet' is administered concomitantly. Interaction with phenytoin, lidocaine and theophylline has also been reported to produce adverse clinical effects.

However, a crossover study in healthy subjects receiving either 'Tagamet' 300 mg. q.i.d. or 800 mg. h.s. concomitantly with a 300 mg. b.i.d. dosage of theophylline (Theo-Dur®, Key Pharmaceuticals, Inc.),

demonstrated less alteration in steady-state theophylline peak serum levels with the 800 mg. h.s. regimen, particularly in subjects aged 54 years and older. Data beyond ten days are not available. (Note: All patients receiving theophylline should be monitored appropriately, regardless of concomitant drug therapy.)

Lack of experience to date precludes recommending 'Tagamet' for use in pregnant patients, women of childbearing potential, nursing mothers or children under 16 unless anticipated benefits outweigh potential risks; generally, nursing should not be undertaken in patients taking the drug since cimetidine is secreted in human milk.

Adverse Reactions: Diarrhea, dizziness, somnolence, headache, rash. Reversible arthralgia, myalgia and exacerbation of joint symptoms in patients with preexisting arthritis have been reported. Reversible confusional states (e.g., mental confusion, agitation, psychosis, depression, anxiety, hallucinations, disorientation), predominantly in severely ill patients, have been reported. Gynecomastia and reversible impotence in patients with pathological hypersecretory disorders receiving 'Tagamet', particularly in high doses, for at least 12 months, have been reported. Reversible alopecia has been reported very rarely. Decreased white blood cell counts in 'Tagamet'-treated patients (approximately 1 per 100,000 patients), including agranulocytosis (approximately 3 per million patients), have been reported, including a few reports of recurrence on rechallenge. Most of these reports were in patients who had serious concomitant illnesses and received drugs and/or treatment known to produce neutropenia. Thrombocytopenia (approximately 3 per million patients) and a few cases of aplastic anemia have also been reported. Increased serum transaminase and creatinine, as well as rare cases of fever, interstitial nephritis, urinary retention, pancreatitis and allergic reactions, including hypersensitivity vasculitis, have been reported. Reversible adverse hepatic effects, cholestatic or mixed cholestatic-hepatocellular in nature, have been reported rarely. Because of the predominance of cholestatic features, severe parenchymal injury is considered highly un-

likely. A single case of biopsy-proven periportal hepatic fibrosis in a patient receiving 'Tagamet' has been reported.

How Supplied: Tablets: 200 mg. tablets in bottles of 100; 300 mg. tablets in bottles of 100 and Single Unit Packages of 100 (intended for institutional use only); 400 mg. tablets in bottles of 60 and Single Unit Packages of 100 (intended for institutional use only), and 800 mg. Tiltab® tablets in bottles of 30 and Single Unit Packages of 100 (intended for institutional use only).

Liquid: 300 mg./5 ml., in 8 fl. oz. (237 ml.) amber glass bottles and in single-dose units (300 mg./5 ml.), in packages of 10 (intended for institutional use only).

Injection:

Vials: 300 mg./2 ml. in single-dose vials, in packages of 10 and 30, and in 8 ml. multiple-dose vials, in packages of 10 and 25.

Pre-filled Syringes: 300 mg./2 ml. in single-dose pre-filled disposable syringes.

Plastic Containers: 300 mg. in 50 ml. of 0.9% Sodium Chloride in single-dose plastic containers, in packages of 4 units. No preservative has been added.

ADD-Vantage® Vials: 300 mg./2 ml. in single-dose, ADD-Vantage® Vials, in packages of 25.

Exposure of the premixed product to excessive heat should be avoided. It is recommended the product be stored at controlled room temperature. Brief exposure up to 40°C does not adversely affect the premixed product.

'Tagamet' HCl (brand of cimetidine hydrochloride) Injection premixed in single-dose plastic containers is manufactured for SK&F Lab Co. by Travenol Laboratories, Inc., Deerfield, IL 60015.

*ADD-Vantage® is a trademark of Abbott Laboratories.

BRS-TG-L73B

Date of issuance Apr. 1987

SK&F LAB CO.

Cidra, P.R. 00639

© SK&F Lab Co., 1988

In peptic ulcer:

**RELIEF
REASSURANCE
REWARD**



Tagamet®
brand of cimetidine
First to Heal

You'll both feel good about it.

RESULTS

A better alternative for hypertensives who are going bananas...

Spare your patients the extra cost—
in calories, sodium and dollars.

Spare your patients the rigors of
dietary K⁺ supplementation.

DYAZIDE[®]

25mg Hydrochlorothiazide/50mg Triamterene/SKF

Effective antihypertensive* therapy...without the bananas

DAW
'DYAZIDE' AS WRITTEN.

* Not for initial therapy. See brief summary.

Before prescribing, see complete
prescribing information in
SK&F CO. literature or PDR.
The following is a brief summary.

WARNING

This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

Contraindications: Concomitant use with other potassium-sparing agents such as spironolactone or amiloride. Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K⁺ levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K⁺ intake. Associated widened QRS complex or arrhythmia requires prompt additional therapy. Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available. Sensitivity reactions may occur in patients with or

without a history of allergy or bronchial asthma. Possible exacerbation or activation of systemic lupus erythematosus has been reported with thiazide diuretics.

Precautions: The bioavailability of the hydrochlorothiazide component of 'Dyazide' is about 50% of the bioavailability of the single entity. Theoretically, a patient transferred from the single entities of triamterene and hydrochlorothiazide may show an increase in blood pressure or fluid retention. Similarly, it is also possible that the lesser hydrochlorothiazide bioavailability could lead to increased serum potassium levels. However, extensive clinical experience with 'Dyazide' suggests that these conditions have not been commonly observed in clinical practice. Angiotensin-converting enzyme (ACE) inhibitors can elevate serum potassium; use with caution with 'Dyazide'. Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids, and during concurrent use with amphotericin B or corticosteroids or corticotropin [ACTH]). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Cumulative effects of the drug may develop in patients with impaired renal function. Thiazides should be used with caution in patients with impaired hepatic function. They can precipitate coma in patients with severe liver disease. Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic and hemolytic anemia have been reported with thiazides. Thiazides may cause manifestation of latent diabetes mellitus. The effects of oral anticoagulants may be decreased when used concurrently with hydrochlorothiazide; dosage adjustments may be necessary. Clinically insignificant reductions in arterial responsiveness to norepinephrine have been reported. Thiazides have also been shown to increase the paralyzing effect of nondepolarizing muscle relaxants such as tubocurarine. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. Triamterene has been found in renal stones in association with the other usual calculus components. Therefore, 'Dyazide' should be used with caution in patients with histories of stone formation. A few occurrences of acute renal failure have been reported in patients on 'Dyazide' when treated with indomethacin. Therefore, caution is advised in administering nonsteroidal anti-inflammatory agents with 'Dyazide'. The

following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine. Hypokalemia is uncommon with 'Dyazide', but should it develop, corrective measures should be taken such as potassium supplementation or increased dietary intake of potassium-rich foods. Corrective measures should be instituted cautiously and serum potassium levels determined. Discontinue corrective measures and 'Dyazide' should laboratory values reveal elevated serum potassium. Chloride deficit may occur as well as dilutional hyponatremia. Concurrent use with chlorpromazine may increase the risk of severe hyponatremia. Serum PBI levels may decrease without signs of thyroid disturbance. Calcium excretion is decreased by thiazides. 'Dyazide' should be withdrawn before conducting tests for parathyroid function. Thiazides may add to or potentiate the action of other antihypertensive drugs. Diuretics reduce renal clearance of lithium and increase the risk of lithium toxicity.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth, anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions, nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances; postural hypotension (may be aggravated by alcohol, barbiturates, or narcotics). Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and respiratory distress including pneumonitis and pulmonary edema, transient blurred vision, sialadenitis, and vertigo have occurred with thiazides alone. Triamterene has been found in renal stones in association with other usual calculus components. Rare incidents of acute interstitial nephritis have been reported. Impotence has been reported in a few patients on 'Dyazide', although a causal relationship has not been established.

Supplied: 'Dyazide' is supplied as a red and white capsule, in bottles of 1000 capsules; Single Unit Packages (unit-dose) of 100 (intended for institutional use only); in Patient-Pak™ unit-of-use bottles of 100.

BRS-DZ-L45

a product of
SK&F CO.
Citra, P.R. 00639

SK&F Co., 1987

MEETINGS

National and Regional

American Medical Association, Annual Meeting, June 26-30, 1988, Chicago. James H. Sammons, Executive Vice President, 535 N. Dearborn St., Chicago, IL 60610.

State and Local

Mississippi State Medical Association, 120th Annual Session, June 15-19, 1988, Biloxi. Charles L. Mathews, Executive Secy., 735 Riverside Drive, P.O. Box 5229, Jackson 39216.

Mississippi Academy of Family Physicians, Annual Meeting, July 27-30, 1988, Biloxi. Mrs. Alyce Palmore, Executive Secy., P.O. Box 12330, Jackson 39211.

Amite-Wilkinson Counties Medical Society, 3rd Monday, March, June, September, December. James S. Poole, Secy., The Gloster Clinic, Gloster 39638. Counties: Amite, Wilkinson.

Central Medical Society, 1st Tuesday, February, April, October, December, 6:30 p.m., Primos Northgate Restaurant, Jackson. Patsy Douglas, Executive Secy., 735 Riverside Dr., Jackson, MS 39202. Counties: Hinds, Leake, Madison, Rankin, Scott, Simpson.

Claiborne County Medical Society, 1st Tuesday, each month, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Secy., P.O. Box 147, Port Gibson 39150. County: Claiborne.

Clarksdale and Six Counties Medical Society, 3rd Wednesday, April, and 1st Wednesday, November, 2:00 P.M., Clarksdale, Rodney Baine, Secy., 110 Yazoo Ave., Clarksdale 38614. Counties: Coahoma, Quitman, Tallahatchie, Tunica.

Coast Counties Medical Society, January, May, and November. H. S. Barrett, Secy., P.O. Box 1810, Gulfport 39501. Counties: Hancock, Harrison, Stone.

Delta Medical Society, 2nd Wednesday, April and October. Walter H. Rose, Secy., 122 E. Baker St., Indianola 38751. Counties: Bolivar, Humphreys, Leflore, Sunflower, Washington, Yazoo.

DeSota County Medical Society, 3rd Thursday, February and August, 1:00 p.m., Kenny's Restaurant, Hernando. Malcolm D. Baxter, Jr., Secy., Baxter Clinic, Hernando 38632. County: DeSoto.

East Mississippi Medical Society, 1st Tuesday, February, April, June, October, December. Charles L. Wilkinson, Secy., Mail: Ms. Jenkins, P.O. Box 4053, Meridian 39305. Counties: Clarke, Kemper, Lauderdale, Neshoba, Newton, Winston.

Homochitto Valley Medical Society, Meetings scheduled quarterly. Fred G. Emrick, Secy., P.O. Box 1488, Natchez 39120. Counties: Adams, Jefferson.

North Central District Medical Society, 3rd Wednesday, March, June, September, January. George V. Smith, 905 Avent Dr., Grenada 38901. Counties: Attala, Carroll, Choctaw, Granada, Holmes, Montgomery, Webster.

Northeast Mississippi Medical Society, 1st Thursday, March, June, September, December. Roger L. Lowery, Secy., 618 Pegram Dr., Tupelo 38801. Counties: Alcorn, Calhoun, Chickasaw, Itawamba, Lee, Monroe, Pontotoc, Prentiss, Tishomingo, Union.

North Mississippi Medical Society, 1st Thursday, April, September, December. W. A. Spencer, Secy., 2161 South Lamar, Oxford 38655. Counties: Benton, Lafayette, Marshall, Panola, Tate, Tippah, Yalobusha.

Pearl River County Medical Society, 2nd Monday, March, June, September, December. J. C. Griffing, Secy., Crosby Memorial Hospital, Picayune 39466. County: Pearl River.

Prairie Medical Society, 2nd Tuesday, March, June, September, December. Perrin N. Smith, Secy., P.O. Box 9000, Columbus 39705. Counties: Clay, Oktibbeha, Noxubee, Lowndes.

Singing River Medical Society, meet quarterly. Owen P. Phillips, Secy., 208 Doctors Plaza, Pascagoula 39567. County: Jackson.

South Central Mississippi Medical Society, 2nd Tuesday, March, June, September, December. Julian T. Janes, Secy., 304 Clark, McComb 39648. Counties: Copiah, Franklin, Lawrence, Lincoln, Pike, Walthall.

South Mississippi Medical Society, 2nd Thursday, March, June, September, December. George R. Bush, Secy., 307 S. 13th Ave., Laurel 39440. Counties: Covington, Forrest, George, Greene, Jasper, Jefferson Davis, Jones, Lamar, Marion, Perry, Smith, Wayne.

West Mississippi Medical Society, 2nd Tuesday, January, March, May, September, October, November, 6:30 p.m., Maxwell's Restaurant, Vicksburg. Wayne M. Petrie, Secy., 1202 Mission Park Dr., Vicksburg 39180. Counties: Issaquena, Sharkey, Warren.

Mississippi Institutions and Organizations Accredited for Continuing Medical Education

The following Mississippi institutions and medical organizations have been accredited in accordance with the "Essentials for Accreditation of Institutions and Organizations Offering Continuing Medical Education Programs" of the Liaison Committee on Continuing Medical Education. Information concerning CME programs for physicians offered by these accredited sources may be obtained by writing the Director, Continuing Medical Education, at the individual institution or organization.

Council on Scientific Assembly
Mississippi State Medical Association
735 Riverside Drive
Jackson, MS 39202

North Mississippi Medical Center
830 Gloster Avenue
Tupelo, MS 38801

Forrest General Hospital
Box 1897
Hattiesburg, MS 39401

Mississippi Baptist Medical Center
1225 N. State Street
Jackson, MS 39201

Gulf Coast Community Hospital
4642 W. Beach Boulevard
Biloxi, MS 39531

Jefferson Davis Memorial Hospital
Box 1488
Natchez, MS 39120

King's Daughter Hospital
Box 948
Brookhaven, MS 39601

Riverside Hospital
Lakeland Drive
Jackson, MS 39208

Biloxi Regional Medical Center
1559 Lafayette St.
Biloxi, MS 39533

Jeff Anderson Regional Medical Center
2124 14th St.
Meridian, MS 39301

Northwest Mississippi Regional Medical Center
Box 1218
Clarksdale, MS 38614

North Panola County Hospital
Drawer 160
Sardis, MS 38666

Singing River Hospital
P.O. Box 112
Pascagoula, MS 39567

Magnolia Hospital
Alcorn Drive
Corinth, MS 38834

Greenwood Leflore Hospital
1508 Leflore Avenue
Greenwood, MS 38930

Gulfpot Memorial Hospital
4500 13th Street
Gulfport, MS 39501

Oxford-Lafayette County Hospital
P.O. Box 946
Oxford, MS 38655

St. Dominic-Jackson Memorial Hospital
969 Lakeland Dr.
Jackson, MS 39216

Delta Medical Center
P.O. Box 5247
Crossroads Station
Greenville, MS 39704-5247

Methodist Hospital
P.O. Box 1311
Hattiesburg, MS 39401

PLACEMENT SERVICE

PHYSICIANS AVAILABLE

BOARD CERTIFIED RADIOLOGIST available part time in Jackson or surrounding small community hospitals. Contact: Box Y, MSMA, P.O. Box 5229, Jackson, MS 39216.

PHYSICIAN COMPLETING RESIDENCY in obstetrics and gynecology seeks practice opportunity in Mississippi. Available July 1989. Contact Greg Patton, M.D., 2325 Glenmary Avenue #2, Louisville, KY 40204.

EXPERIENCED PHYSICIAN, seeking licensure, wants position as assistant. Location flexible. P.O. Box 225, Bay Springs, MS 39422.

A Commitment to Excellence in Health Care

Mississippi Emergency Association, P.A. (MEA) a physician-owned and managed group has created an environment for physicians that promotes the ideals of private practice while freeing doctors from the administrative and financial demands of the private practitioner.

Board certified or board eligible physicians in the area of Emergency Medicine, Internal Medicine, and Family Medicine are presented a variety of professional and personal rewards, including excellent salaries, benefits, and advancement opportunities.

MEA is a dynamic, growing corporation that delivers quality health care. If you would like to know what career opportunities we can offer you, send your curriculum vitae to Sheila M. Stringer or call (601) 366-6503.

**Mississippi Emergency
Association, P.A.
P.O. Box 12917
Jackson, MS 39236-2917**

PHYSICIANS WANTED

EMERGENCY PHYSICIANS WANTED. Part-time and full-time positions in northeast Mississippi. Call (601) 328-8385.

MULTI-SPECIALTY CLINIC seeks BC/BE Hematologist/Oncologist. Modern, fully equipped 220 bed hospital. Contact John Wallace, Internal Medicine Clinic, 1203 Jefferson Street, Laurel, MS; (601) 649-6382 or MS WATS 1-800-654-7918.

IMMEDIATE OPPORTUNITY for medical director and part-time physicians. Family/General/Internal Medicine/ER. Highest pay in the industry. Why work for less when you can work for the best? Call (601) 328-9623.

For information about the *Journal's* classified section or placement service, please contact the Managing Editor, P.O. Box 5229, Jackson, MS 39216.

PHYSICIANS NEEDED

Physicians (especially specialists such as ophthalmologists, pediatricians, orthopedists, neurologists, etc.) interested in performing consultative evaluations (according to Social Security guidelines) should contact the Medical Relations Office. WATS 1-800-962-2230; Jackson, 922-6811; extensions 2276, 2330, and 2190.



DISABILITY DETERMINATION SERVICES
1-800-962-2230

MEDICAL CLINIC FOR SALE

*Excellent Opportunity For
General and/or Family Practitioner*

Due to retirement, doctor wishes to sell clinic with well established patient load. All medical equipment, furniture, fixtures and current medical records included in sale.

Facility:

2,597 square foot building on prime 96' by 90' corner lot located between downtown business district and local hospital. Facility easily adaptable for partnership. Adequate room for expansion of facility.

Medical Community:

Recently expanded and renovated hospital with adjoining 60 bed nursing facility. All fully accredited.

Community:

North Central Mississippi County Seat with major industries, good housing market, highly regarded school system, active community involvement in religious organizations, social and civic affairs.

For more information, please contact:

Dr. George Bounds

601-285-6417 (Office)

601-285-6212 (Residence)

CLASSIFIED

MEDICAL EQUIPMENT. Medical supplies, office equipment, waiting room furniture including: x-ray machine in excellent condition, exam tables, EKG machine, tele-printer, flame photometer, like-new typewriter, loveseat, end tables, lamps, chairs, many more items too numerous to mention. *Best offer.* Inquire Columbus, MS (601/328-0830).

VISION BLOOD INSTRUMENT. Abbot Labs. Model 1537. \$15,000. Still in warranty. Call (601) 362-1577.



Index to Advertisers

Ayerst Laboratories	10A, 10B, 10C, 10D
Bounds, George	11
Disability Determination Service	100
Harrel Chevrolet	92
Key Pharmaceuticals	95, 96
Eli Lilly and Company	68
Marion Laboratories	6, 6A
Medical Assurance Co. of Miss.	second cover
Miss. Emergency Association	100
MSMA Benefit Plan and Trust	70
Northtowne Printers	98

OfficeSource	73
Palisades Pharmaceuticals	69
Postgraduate Medicine	4
Premier Printing	90
Roche Laboratories	third, fourth covers
Smith Kline and French	98A, 98B
Trustmark	93
U. S. Army	8
Jon Wimbish	10
Thomas Yates and Co.	97

Now Available

The Health Policy Agenda for the American People

A Comprehensive Framework for the Future

After five years of collaborative effort, The Health Policy Agenda for the American People (HPA) has issued its Summary and Final Reports recommending policy guidelines for the future of our health care system. This landmark effort establishes a comprehensive, long-term framework for U.S. health policy into the 21st century.

Broad Reaching Recommendations

The HPA Reports contain guiding principles and specific policy recommendations covering a wide subject area:

- supplying, distributing and educating health professionals
- providing technology and facilities
- organizing resources
- communicating health information
- ensuring quality
- paying for services
- preparing for the future through research

A Health Policy Partnership

Representatives of the health professions, insurers, health care institutions, consumer organizations, business groups and the government collaborated to develop recommendations that reflect this broad array of viewpoints. Learn what the HPA has recommended on your behalf...and how it will affect your future.

Order Now

To order your copies of the HPA Summary and Final Reports **call toll-free 1-800-621-8335. In Illinois call collect 312/645-4987.** Or complete and mail the form below with your payment to:
The Health Policy Agenda for the American People
P.O. Box 10946
Chicago, Illinois 60610-0946
Order No. OP-207

Order Form

Please send me _____ copies of the HPA Summary and Final Reports (OP-207) at \$35 for the two volume set.

Subtotal _____
Sales tax (IL, NY residents) _____
Total _____

Name

Address

City

State/Zip

Please charge my: ☐ VISA ☐ MASTERCARD

Credit Card Number

Expiration Date

Signature

Phone

Payment must accompany order. Please allow 4-6 weeks for delivery.
For information on bulk purchases, please call 312/280-7168.

The *New* Roche Product Books

- Offer a supplement to, not a substitute for, patient contact
- Support your specific instructions to the patient
- Provide a permanent general reinforcement of your oral counseling

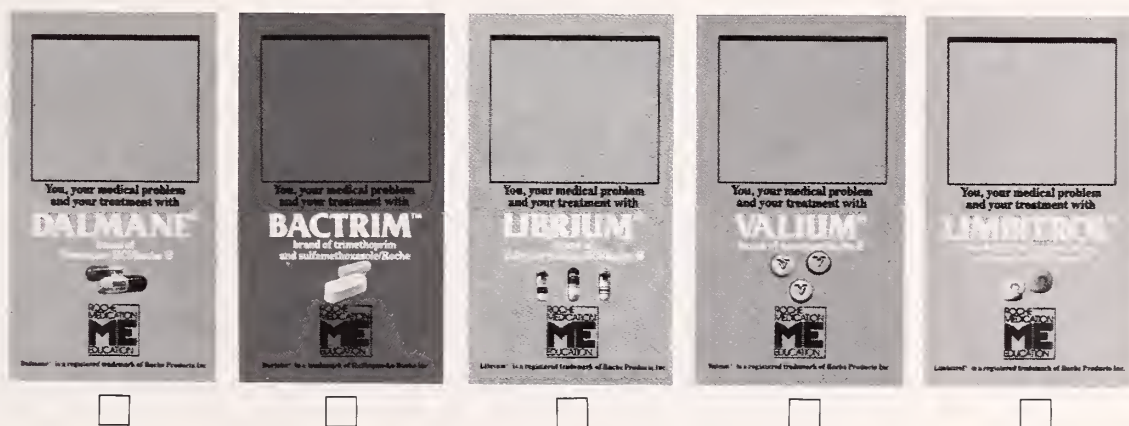
An ongoing Roche commitment to patient education

Roche has always believed that knowledge is each individual's key to good health and has long been committed to providing health care information to both professionals and the public. However, we have also always believed that the health care professional is and should be the prime source of medication information to patients. The Roche Medication Education (ME) program, begun in 1978, is one example of this commitment.

In the past seven years, over 50 million "WHAT IF" and "HOW TO" booklets have been provided by Roche for distribution to patients by physicians and other health care professionals.

Because you are the prime source of medication information for your patients, we invite you to look over the booklets listed below and request a complimentary supply of those applicable to your practice.

Complete the coupon and mail it to Professional Services Department, Roche Laboratories, Division of Hoffmann-La Roche Inc., Nutley, New Jersey 07110.



NAME _____

STREET ADDRESS _____

CITY _____

STATE _____

ZIP _____

ROCHE®

Medicines that matter
from people who care

We Wrote the Books on Patient Medication Education...

LIBRARY

MAR 25 1988

NEW YORK ACADEMY
OF MEDICINE

N.Y. ACADEMY OF MED
2 EAST 103RD ST
NEW YORK NY 10029-5293
Arthur L. Brown

You, your medical problem
and your treatment with

DALMANE®

brand of
chlorazepate HCl/Roche



You, your medical p
and your treatment

LIBRIUM

brand of
chlordiazepoxide HCl



You, your medical problem
and your treatment with

BACTRIM™

brand of trimethoprim
and sulfamethoxazole/Roche



You, your medical problem
and your treatment with

VALIUM®

brand of diazepam/Roche



You, your medical problem
and your treatment with

LIMBITROL®

brand of clonidine hydrochloride and
nortriptyline HCl/Roche



Copyright ©
1986 by Hoffmann-La Roche Inc.
and Roche Products Inc.
All rights reserved.

To order a complimentary supply of Roche Product Books, please see preceding page.

JOURNAL

OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION

APRIL

1988



Early **Cancer** Detection

Your confidence moves us. Again.

This year, more Mississippi doctors insured with us than with any other firm. Your confidence moves us... in more ways than one.

Growth through stability. Since we wrote our first policy in November of 1977, Medical Assurance Company has experienced steady growth and our membership is constantly increasing. The reason that more and more physicians are turning to us is simple: They know that they are receiving the most cost effective coverage backed by a financially sound company.

At Medical Assurance Company, savings and financial strength are provided by a program of sound investments and underwriting guidelines. Our staff is made up of experienced insurance professionals. And all claims are

reviewed by a panel of medical experts, so you can rest assured that your needs are understood.

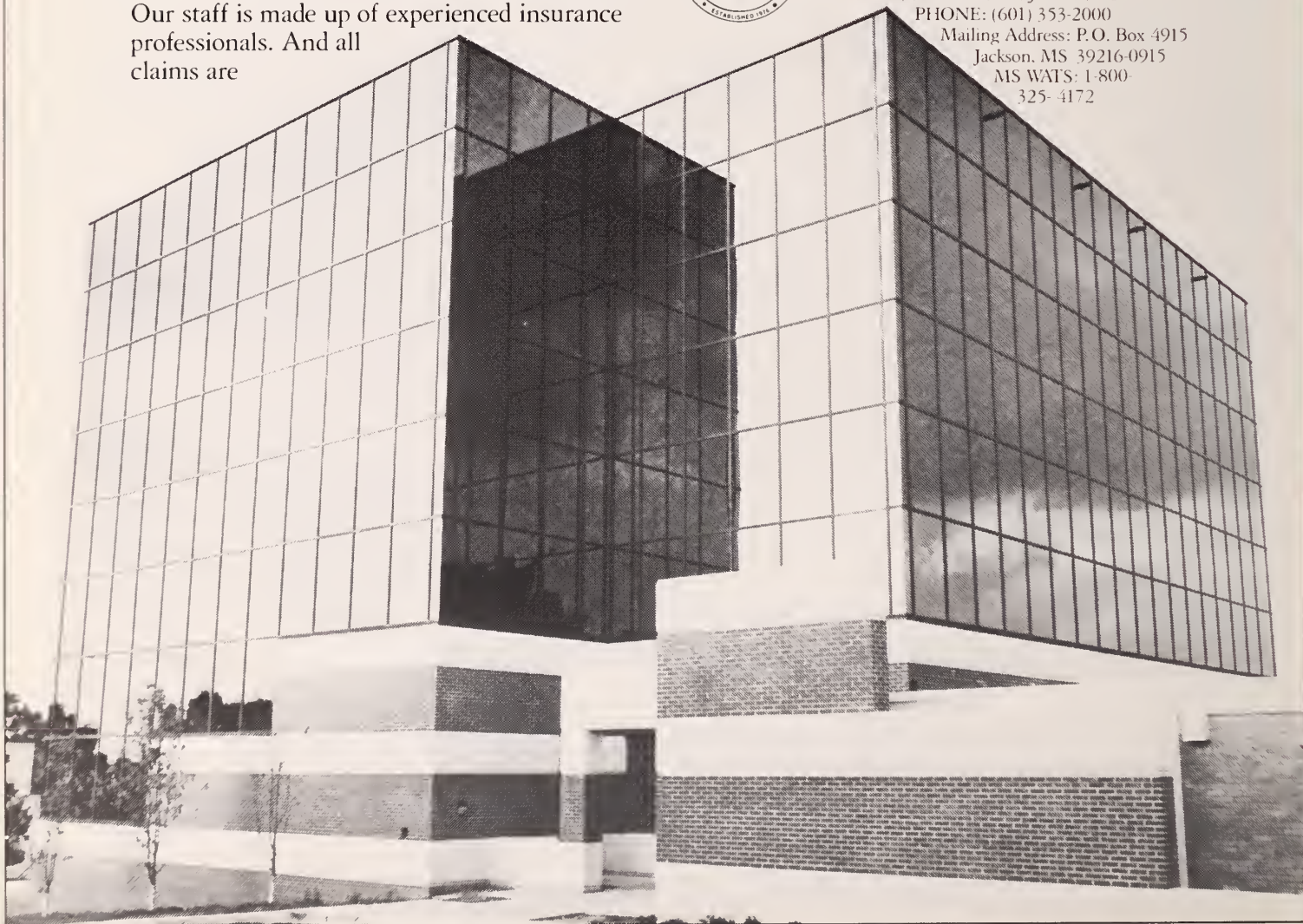
A new location. To house a larger staff and to provide even better service, we have moved back to the State Medical Association Building, this time occupying an entire floor.

For answers to any questions you might have regarding medical professional liability insurance, visit us in our new offices on Riverside Drive, or call us anytime.



Medical Assurance Company of Mississippi

Street Address: Suite 301
735 Riverside Dr., Jackson, MS
PHONE: (601) 353-2000
Mailing Address: P.O. Box 4915
Jackson, MS 39216-0915
MS WATS: 1-800-
325-4172



JOURNAL

OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION

APRIL 1988

VOLUME XXIX

NUMBER 4

SCIENTIFIC

Cancer Prevention: National Directions — Local Realities 101

*D. Melessa Phillips, M.D., William H.
Replogle, Ph.D., Lodovico Balducci, M.D.,
Sheila D. Sanders, MLT*

The Treatment of Primary Dysmenorrhea with Flurbiprofen 106

*Kathy S. Gookin, R.N., B.S.N., Kenneth R.
Griffis, M.D., Ramon P. McGeehee, M.D.,
Winfred L. Wiser, M.D., John C. Morrison,
M.D.*

Radiological Seminar CCXLX: Herpes Simplex Encephalitis — CT Findings 109

*T. Gerald Gates, M.D. and James U. Morano,
M.D.*

EDITORIALS

EDITOR

Myron W. Lockey, M.D.

EDITOR EMERITUS

W. Moncure Dabney, M.D.

ASSOCIATE EDITORS

Arthur A. Derrick, Jr., M.D.

Joseph E. Johnston, M.D.

MANAGING EDITOR

Patsy Silver

PUBLICATIONS COMMITTEE

Richard C. Miller, M.D.,

Chairman

George H. Martin, M.D.

William J. Gibson, M.D.

and the editors

THE ASSOCIATION

W. Lamar Weems, M.D.

President

David R. Steckler, M.D.

President-Elect

Don Q. Mitchell, M.D.

Secretary-Treasurer

James C. Waites, M.D.

Speaker

H. Vann Craig, M.D.

Vice Speaker

Charles L. Mathews

Executive Director

Fantasies 112

W. Lamar Weems, M.D.

Patients Caught in Medicare 113

Crossfire

Myron W. Lockey, M.D.

DEPARTMENTS

Comments 113

Medical Organization 117

New Members 121

Deaths 122

Personals 125

Copyright© 1988, Mississippi State Medical Association. The views expressed in this publication reflect the opinions of the authors and do not necessarily state the opinions or policies of the Mississippi State Medical Association.

THE JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION (ISSN 0026-6393) is owned and published monthly by the Mississippi State Medical Association, founded 1856, at 735 Riverside Drive, Jackson, Mississippi 39202. Subscription rate, \$25.00 per annum; \$35.00 per annum for foreign subscriptions; \$2.25 per copy, as available. Advertising rates furnished on request. Printed by The Ovid Bell Press, Inc., Fulton, Missouri. Second-class postage paid at Jackson, Mississippi, and at additional mailing offices. POSTMASTER: Send address changes to Mississippi State Medical Association, P.O. Box 5229, Jackson, Mississippi 39216.

**You're
a Professional.**

**You need Professional
Health Insurance
Coverage.**

MSMA

Benefit Plan and Trust

MSMA Benefit Plan and Trust is a superior insurance program which fulfills the quality of coverage and affordability that everyone wants.

Sponsored by the Mississippi State Medical Association, the MSMA Benefit Plan and Trust offers life and health benefits to physician members of MSMA, their employees and families.

- \$1,000,000 lifetime benefits.
- Life Coverage up to \$50,000.
- Broad benefits with fair and equitable rates.
- Management by and for physicians.
- Non-profit and administered at lowest possible cost.

For Complete Description of Benefits Write:

MSMA Benefit Plan and Trust

P.O. Box 55509
Jackson, MS 39216

NEWSLETTER

April 1988

Dear Doctor:

"Adolescent Health: Charting a Course Through Turbulent Times" is the topic of an AMA National Congress, May 12-14 in Chicago. A feature of this meeting is a showcase of effective programs now at work to promote adolescent health at the local, regional and national levels. The AMA's Adolescent Health Initiative considers the following as indicators of need for efforts to reduce high risk behavior:

- overall morbidity and mortality rates for adolescents have risen 11% in the last 20 years;
- two-thirds of American teens use an illicit drug before finishing high school;
- one-third of all abortions are performed on adolescents, while each year 30,000 girls younger than 15 become pregnant.

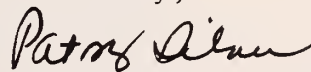
For information about the conference, please call 800/621-8335 or 312/645-4987.

The American Diabetes Association will sponsor a statewide professional seminar entitled "New Directions in Diabetes Management" on May 13-14 in Jackson. For information, please call the ADA at 981-9511.

Parents many times misunderstand a physician's instructions about medication for their children, suggests a letter in the April American Journal of Diseases of Children. In a study of 52 mother-child visits it was found that 20 mothers made a total of 34 errors when questioned about the physician's discussion of medication, when to expect improvement, and need for follow-up. The age and education of the mothers did not affect the error rate. The author suggests that drug dosage information be written down, be reemphasized by a nurse, and distractions minimized.

MSMA's 120th Annual Session takes place June 15-19. Make plans now to attend!

Sincerely,



Patsy Silver
Managing Editor

You don't have time to waste on medical writing that is cluttered with complicated statistics and data. Depend on Postgraduate Medicine to provide you with clearly written, well-illustrated articles on matters of practical importance in your daily life.

You don't have time to waste on medical writing that is cluttered with complicated statistics and data. Depend on *Postgraduate Medicine* to provide you with clearly written, well-illustrated articles on matters of practical importance in your daily life.

DATELINE

Alzheimer's, Related Dementias
Cost \$88 Billion in 1985

Washington, DC - Alzheimer's disease and related dementias cost \$88 billion in 1985, according to a recent study. In "Losing a Million Minds," a study by the U. S. Office of Technology Assessment, it is noted that since the government pays only 10 to 15% of these costs, affected families face a heavy burden. The investigators note that the total is conservative. Not included is cost of stress-related illnesses in caregivers.

Ferrets Unsuitable Pets
For Young Children

Chicago, IL - Physicians should know that ferrets are unsuitable pets for families with young children, says a report in the April 1 JAMA. The authors describe three infants who suffered severe facial injuries (two had their ears bitten off) in unprovoked attacks by pet ferrets. Not only are ferrets unpredictable, but there is no effective rabies vaccine for ferrets yet. More than 1 million are kept as pets in the U. S.

NCI Urged to Emphasize
Cancer Prevention

Chicago, IL - A report in the March 18 JAMA urges the National Cancer Institute to place substantially greater emphasis on cancer prevention, calling it "the most neglected element" of government cancer control efforts. Two needs are aggressive anti-smoking efforts and more study of nutritional factors in cancer, the authors say. The NCI's announced goal is to reduce cancer mortality by as much as 50% by the year 2000.

Practice Evaluation
Brochure Available

Chicago, IL - How do you rate your practice? A new publication from the AMA can help answer this question. "Measuring Medical Practice: Statistics for the Physician" seeks to help physicians understand how practice patterns are measured in a peer review process and how to substantiate the physician's own assessment for the services rendered. Cost to AMA members is \$10. Call the AMA Order Department, (312) 280-7168.

Regional Preventive Health
Conference Is Next Month

Montgomery, AL - The Southern Regional Preventive Health Conference will be held May 17-20 in Mobile. Theme is "Getting the Message Out: Prevention Today for a Healthier Tomorrow." Among topics to be discussed are: nutrition, AIDS, suicide prevention, the drug culture, teen pregnancy, elderly and adult screening, and stress management. Sponsors are Alabama Medicaid and Alabama Dept. of Health. Call (205) 277-2710.

Counsel to Authors

THE JOURNAL welcomes manuscripts which should be submitted to the Editors at 735 Riverside Drive, Jackson, MS 39216, in original and at least one duplicate copy. They must be typewritten double spaced on 8½ by 11-inch white paper. **Brief manuscripts (about 2,500 words or 8 pages) will be given preference over longer articles.**

The author is responsible for all statements made in his work, including changes made by the manuscript editor. Manuscripts are received with the understanding that they are not under simultaneous consideration by any other publication and have not been previously published. All manuscripts will be acknowledged, and while those rejected are generally returned to the author, the JOURNAL is not responsible in event of loss. Manuscripts accepted for publication become the property of the JOURNAL and are copyrighted by the association when published. They may not be published elsewhere without written release and permission from both the JOURNAL and the author.

All copy must be double spaced, including legends, footnotes, and references. Generous margins at the top, bottom, and on both sides of the page should be allowed. Each page after the title page should be consecutively numbered and carry a running head identifying the paper and author.

Titles should be short, specific, and clear. Ordinarily, a title should not exceed 80 characters, including punctuation.

References should be limited to a maximum of 10. If there are more than 10, the references will be omitted and a notation made to write the author for a complete list. Textbooks, personal communications, and unpublished data may not be cited as references. References must include names of authors, complete title cited, name of journal or book spelled out or abbreviated according to the *Index Medicus*, volume number, first and last page numbers, month, date (if published more frequently than monthly), and year. References should be arranged according to order listed in the text and must be numbered consecutively.

Manuscripts accepted for publication are subject to copy editing. Authors will receive galley proof prior to publication. Galley proof is only for correction of errors, and text changes

may not be made. The galley proof should be returned by the author within 48 hours from receipt, and no further changes may be made.

Illustrations consist of all material which cannot be set into type such as photographs, line drawings, graphs, charts, and tracings. Illustrations should be submitted separately from text copy. Figures and drawings should be professionally prepared with black ink on white paper. Photographs should be of high resolution, unmounted, untrimmed, glossy prints. Each must be clearly identified. No charges are made to authors for up to four illustration engravings. More are not permitted unless voted on by two editors and extra costs must be absorbed by the author.

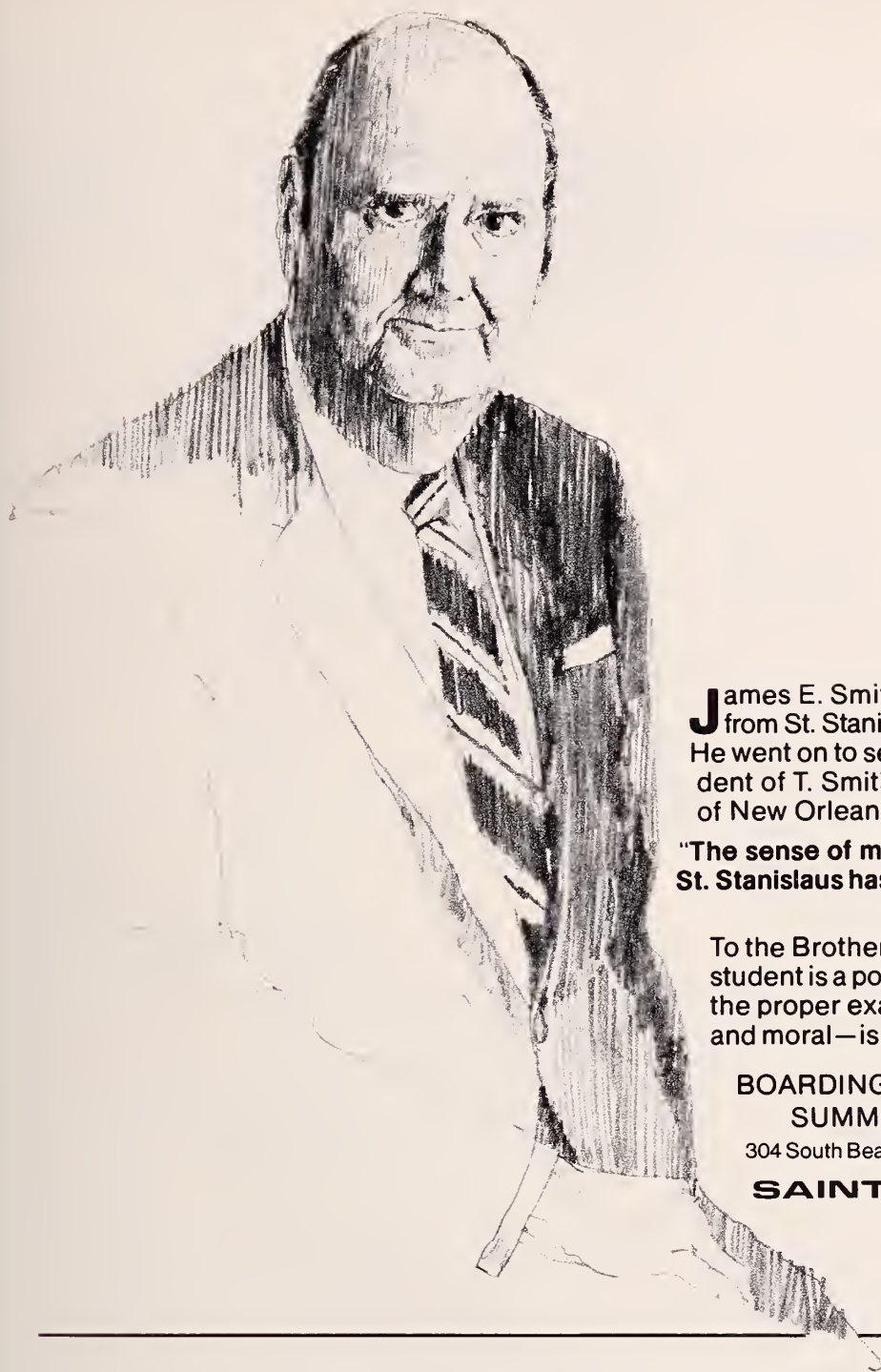
Illustrations must be numbered and cited in the text. Legends, not exceeding 40 words and preferably shorter, must accompany each illustration, typed double spaced on separate sheets. The following information should appear on a gummed label affixed to the back of each illustration: Figure number, manuscript title, author's name, and arrow indicating top of the illustration.

In photographs in which there is any possibility of personal identification, an acceptable legal release must accompany the material.

A thesis summary of 75 to 100 words must accompany each manuscript.

Reprints may be obtained at cost plus shipping charges from the association and **should be ordered prior to publication.** The JOURNAL reserves the right to decline any manuscript. Authors should avoid placing subheads in the text, and the Editors reserve the prerogative of writing and inserting subheads according to JOURNAL style. — *The Editors.*

In addition, in view of *The Copyright Revision Act of 1976*, effective Jan. 1, 1978, transmittal letters to the editor should contain the following language: "In consideration of the Mississippi State Medical Association's taking action in reviewing and editing my submission, the author(s) undersigned hereby transfers, assigns, or otherwise conveys all copyright ownership to the MSMA in the event that such work is published by the MSMA." We regret that transmittal letters not containing the foregoing language signed by all authors of the submission will necessitate delay in review of the manuscript. — *The Editors.*



James E. Smith graduated from St. Stanislaus in 1945. He went on to serve as president of T. Smith & Son, Inc. of New Orleans as well as the Dock Board.

"The sense of moral values instilled in me at St. Stanislaus has been the cornerstone of my whole adult life."

To the Brothers of the Sacred Heart, every student is a potential leader. And giving him the proper example—spiritual, intellectual and moral—is our mission at St. Stanislaus.

**BOARDING SCHOOL GRADES 6-12
SUMMER CAMP AGES 9-14**

304 South Beach Blvd. Bay St. Louis, MS 39520

SAINT STANISLAUS



St. Stanislaus helps build leaders.

FOR A FREE BROCHURE CALL THE DIRECTOR OF ADMISSIONS—(601) 467-9057.

New this year . . .

One more reason to join the AMA


Special benefit packages available with 1988 membership



A diverse membership has diverse needs, and the AMA is committed to addressing those needs. This year we're introducing something new when you join the AMA or renew your membership. In your AMA Membership Kit you'll have the opportunity to sign up for one of three *benefit packages* of publications, conferences, participatory panels, focused issue updates, etc., on topics related to the area you designate. Each package is tailored to address your particular interests:

- *Medical and scientific information and education* designed to enhance your practice, profession, and the public health.
- *Representation concentrated specifically on economic concerns*, such as professional liability and third party reimbursement.
- *Representation on a broad range of issues*, including not only economic concerns, but also quality of care, ethical issues, public health, and scientific issues.

If your Preferred Professional Mailing Address should change, please make the change to the right of the address shown. Be sure to retain your membership card.
Use this portion of the card for changes only.

	New Address _____
	City _____
	State _____ Zip _____
	Telephone no. _____

IMPORTANT: In order to receive your full range of membership benefits, you **MUST** return this card.

In addition to my usual benefits, I prefer a specially designed package of publications, topical conferences, participatory panels, focused issue updates which focus on the following:

(Check only one)

☐ **Medical and Scientific Information and Education** which will enhance my practice, profession, and the health of the public.

☐ **Representation Concentrated Specifically on Economic Concerns** facing my practice and profession, such as professional liability and third-party reimbursement.

☐ **Representation on a Broad Range of Issues** facing my practice and profession, including not only professional liability and third-party reimbursement but also quality of care, ethical issues, public health, scientific issues, etc.

Look for this card in your AMA Membership Kit

To receive your full range of benefits, select one and only one of these free packages by filling out the business reply card in your AMA Membership Kit.

Please look for the card in your AMA Membership Kit and return it promptly. Your new benefit package is one more way the AMA supports you as a physician.

James H. Sammons, MD
Executive Vice President



American Medical Association
535 North Dearborn Street
Chicago, Illinois 60610

A better alternative for hypertensives who are going bananas...

Spare your patients the extra cost—
in calories, sodium and dollars.

Spare your patients the rigors of
dietary K⁺ supplementation.

DYAZIDE®

25 mg Hydrochlorothiazide/50 mg Triamterene/SKF

Effective antihypertensive*
therapy...without
the bananas

DAW
'DYAZIDE' AS WRITTEN.

* Not for initial therapy. See brief summary.

Before prescribing, see complete
prescribing information in
SK&F CO. literature or PDR.
The following is a brief summary.

* WARNING

This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

Contraindications: Concomitant use with other potassium-sparing agents such as spironolactone or amiloride. Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.
Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K⁺ levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K⁺ intake. Associated widened QRS complex or arrhythmia requires prompt additional therapy. Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available. Sensitivity reactions may occur in patients with or

without a history of allergy or bronchial asthma. Possible exacerbation or activation of systemic lupus erythematosus has been reported with thiazide diuretics.
Precautions: The bioavailability of the hydrochlorothiazide component of 'Dyazide' is about 50% of the bioavailability of the single entity. Theoretically, a patient transferred from the single entities of triamterene and hydrochlorothiazide may show an increase in blood pressure or fluid retention. Similarly, it is also possible that the lesser hydrochlorothiazide bioavailability could lead to increased serum potassium levels. However, extensive clinical experience with 'Dyazide' suggests that these conditions have not been commonly observed in clinical practice. Angiotensin-converting enzyme (ACE) inhibitors can elevate serum potassium; use with caution with 'Dyazide'. Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids, and during concurrent use with amphotericin B or corticosteroids or corticotropin [ACTH]). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Cumulative effects of the drug may develop in patients with impaired renal function. Thiazides should be used with caution in patients with impaired hepatic function. They can precipitate coma in patients with severe liver disease. Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic and hemolytic anemia have been reported with thiazides. Thiazides may cause manifestation of latent diabetes mellitus. The effects of oral anticoagulants may be decreased when used concurrently with hydrochlorothiazide; dosage adjustments may be necessary. Clinically insignificant reductions in arterial responsiveness to norepinephrine have been reported. Thiazides have also been shown to increase the paralyzing effect of nondepolarizing muscle relaxants such as tubocurarine. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. Triamterene has been found in renal stones in association with the other usual calculus components. Therefore, 'Dyazide' should be used with caution in patients with histories of stone formation. A few occurrences of acute renal failure have been reported in patients on 'Dyazide' when treated with indomethacin. Therefore, caution is advised in administering nonsteroidal anti-inflammatory agents with 'Dyazide'. The

following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine. Hypokalemia is uncommon with 'Dyazide', but should it develop, corrective measures should be taken such as potassium supplementation or increased dietary intake of potassium-rich foods. Corrective measures should be instituted cautiously and serum potassium levels determined. Discontinue corrective measures and 'Dyazide' should laboratory values reveal elevated serum potassium. Chloride deficit may occur as well as dilutional hyponatremia. Concurrent use with chlorpropamide may increase the risk of severe hyponatremia. Serum PBI levels may decrease without signs of thyroid disturbance. Calcium excretion is decreased by thiazides. 'Dyazide' should be withdrawn before conducting tests for parathyroid function. Thiazides may add to or potentiate the action of other antihypertensive drugs. Diuretics reduce renal clearance of lithium and increase the risk of lithium toxicity.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances; postural hypotension (may be aggravated by alcohol, barbiturates, or narcotics). Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and respiratory distress including pneumonitis and pulmonary edema, transient blurred vision, sialadenitis, and vertigo have occurred with thiazides alone. Triamterene has been found in renal stones in association with other usual calculus components. Rare incidents of acute interstitial nephritis have been reported. Impotence has been reported in a few patients on 'Dyazide', although a causal relationship has not been established.

Supplied: 'Dyazide' is supplied as a red and white capsule, in bottles of 1000 capsules; Single Unit Packages (unit-dose) of 100 (intended for institutional use only); in Patient-Pak™ unit-of-use bottles of 100.

BR5-DZ-L45

a product of
SK&F CO.
Ciba, P.R. 00639

© SK&F Co., 1987



First hundreds...



Then thousands...

Soon more than a million.

Soon more than a million insulin users will be taking Humulin.


And no wonder. Humulin is identical to the insulin produced by the human pancreas—except that it is made by rDNA technology.

Humulin is not derived from animal pancreases. So it contains none of the animal-source pancreatic impurities that may contribute to insulin allergies or immunogenicity.

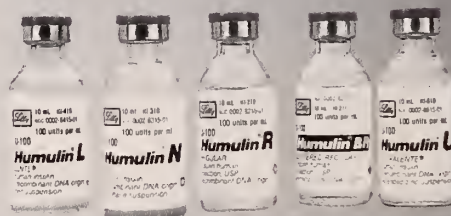
The clinical significance of insulin antibodies in the complications of diabetes is uncertain at this time. However, high antibody titers have been shown to decrease the small amounts of endogenous insulin secretion some insulin users still have. The lower immunogenicity of Humulin has been shown to result in lower insulin antibody titers; thus, Humulin may help to prolong endogenous insulin production in some patients.

Any change of insulin should be made cautiously and only under medical supervision. Changes in refinement, purity, strength, brand (manufacturer), type (regular, NPH, Lente®, etc), species/source (beef, pork, beef-pork, or human), and/or method of manufacture (recombinant DNA versus animal-source insulin) may result in the need for a change in dosage.

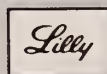
DIET...EXERCISE...

Humulin® 
human insulin
(recombinant DNA origin)

For your insulin-using patients



Lilly Leadership
IN DIABETES CARE



Eli Lilly and Company
Indianapolis, Indiana
46285

© 1987, ELI LILLY AND COMPANY

HI-2907-B

849313

ORIGINAL PAPERS

Cancer Prevention: National Directions — Local Realities

D. MELESSA PHILLIPS, M.D., WILLIAM H. REPLOGLE, PH.D.
LODOVICO BALDUCCI, M.D., SHEILA D. SANDERS, MLT (ASCP)
Jackson, Mississippi

IN THE SUMMER of 1985, the American Cancer Society (ACS) published results of a national survey of 1035 primary care physicians' attitudes and practices concerning the early detection of cancer in asymptomatic people.¹ This 1985 survey was undertaken to analyze and update ACS cancer-related screening protocols (see Table 1) that reflected the Society's continuing interest in identifying cancer precursors and in detecting cancer early in asymptomatic patients. Funded by the Ohio Division of the ACS, the study was designed to determine what primary care physicians were actually doing in their practices to detect cancer at an early stage.

Results were encouraging but mixed. While most physicians in 1985 were actively engaged in and even increasing their efforts to perform some type of cancer detection, substantial controversy was reported in compliance with ACS screening guidelines for cervical, breast, colorectal and lung cancer. Ninety percent of all surveyed physicians were performing Pap testing, breast physical examinations, and digital rectal and prostate exams; 75% did stool testing for occult blood in asymptomatic patients. However, only 18% of those surveyed followed ACS guidelines for proctoscopic examinations and only 11% for screening mammography. Two out of three

In 1980 the American Cancer Society (ACS) presented guidelines for the early detection of cancer in asymptomatic patients. The authors state that the purpose of the present study was to assess the status of cancer detection and screening practices among primary care physicians in Mississippi with reference to current ACS guidelines. They note that with the exceptions of mammography, sigmoidoscopy, and endometrial tissue sampling, the cancer screening practices of these physicians appear to be fairly consistent with ACS guidelines. They conclude that the results indicate a clear need for the primary care physicians' active involvement in early cancer detection.

surveyed practitioners did not recommend routine proctoscopy for asymptomatic patients age 50 or over who had negative stool guaiacs; 60% used stool occult blood testing as a single prescreen for colorectal cancers, rather than in combination with a proctoscopic exam. One third disagreed with ACS guidelines for mammography, citing cost, concern about radiation, and their opinion that mammography was not necessary in asymptomatic patients. Most physicians did not recommend either proctoscopy or mammography for patients unless cancer symptoms were present.

From the Department of Family Medicine, University Medical Center, Jackson, MS (Dr. Phillips, Dr. Replogle and Ms. Sanders), and the Department of Medicine, University Medical Center and Oncology Section, VA Medical Center, Jackson, MS (Dr. Balducci).

In contrast, other ACS guidelines were exceeded by many physicians. Ninety percent of surveyed physicians did Pap testing at least once a year on asymptomatic women and 42% still recommended the use of the routine chest x-ray to screen for lung cancer.

In late 1986, the Mississippi Division of the American Cancer Society, in conjunction with the UMC Department of Family Medicine, administered a similar survey to 1009 Mississippi physicians to assess the status of cancer detection and screening in a predominantly rural state. The purpose of the 1986 local study was to determine the compliance of Mississippi primary care physicians with published ACS Cancer Screening Guidelines. Of particular interest was the relationship between community size and type of medical practitioners, and whether local availability or cost of more sophisticated screening procedures (especially mammography and proctoscopy) influenced the physicians' ability to provide comprehensive early cancer detection. The study compiled state physicians' replies to questions about screening for lung, breast, cervical, uterine, and colorectal cancers.

Method

A roster of 1009 general practitioners, family physicians, internists, and obstetrician-gynecologists was obtained from the Mississippi State Medical Association. A questionnaire was sent to each physician, who was asked to complete the survey reflecting their current practice. Five hundred and forty-four physicians returned questionnaires; 63 indicated they were not primary care physicians or returned incomplete surveys and were excluded from the study. This resulted in a final sample size of 481 surveyed physicians. Forty-three percent of respondents classified themselves as family physicians, 16% as general practitioners, 24% as internists, and 17.5% as OB/GYNs.

Results

1. *Physician Distribution/Community Size* (see Table 2). Forty-seven percent of responding physicians practice in Mississippi towns of less than 20,000 people. Of these, 84.5% are general or family practitioners. Sixty-two percent of surveyed internists and OB/GYNs are located in communities of over 30,000 population. The majority of the state's

TABLE 1
SUMMARY OF AMERICAN CANCER SOCIETY RECOMMENDATIONS FOR THE EARLY DETECTION OF
CANCER IN ASYMPTOMATIC PEOPLE

<i>Test or Procedure</i>	<i>Sex</i>	<i>Age</i>	<i>Frequency</i>
Sigmoidoscopy	M&F	Over 50	After 2 negative exams 1 year apart, perform every 3-5 years
Stool Guaiac Slide Test	M&F	Over 50	Every year
Digital Rectal Exam	M&F	Over 40	Every year
Pap Test	F	20-65; under 20 if sexually active	After 2 negative exams 1 year apart, perform at least every 3 years
Pelvic Examination	F	20-40 Over 40	Every 3 years Every year
Endometrial Tissue Sampling	F	At menopause, women at high risk*	At menopause
Breast Self-Exam	F	Over 20	Every month
Breast Physical Exam	F	20-40 Over 40	Every 3 years Every year
Mammography	F	35-40 40-49 Over 50	Baseline Every 1-2 years Every year
Chest X-Ray			Not recommended
Sputum Cytology			Not recommended
Health Counseling and Cancer Checkup†	M&F	Over 20 Over 40	Every 3 years Every year

* History of infertility, obesity, failure to ovulate, abnormal uterine bleeding, or estrogen therapy.

† To include examination for cancers of the thyroid, testicles, prostate, ovaries, lymph nodes, oral region, and skin.

TABLE 2

PHYSICIAN DISTRIBUTION (%) BY COMMUNITY SIZE

	< 20K	20K-30K	> 30K
Internal Medicine	19	19	64
Family Medicine	63	7	30
General Practitioners	80	9	11
Obstetricians/ Gynecologists	17	23	60
Overall	47	13	40

residents (82%) reside in communities of less than 30,000; only seven cities in Mississippi have a population of over 30,000 (Biloxi, Greenville, Gulfport, Hattiesburg, Jackson, Meridian and Pascagoula). Almost one-third of all physician respondents live in towns of 10,000 or less, while 40% were located in communities of 30,000 or more.

2. *Compliance with ACS Guidelines.* The percentage of Mississippi primary care physicians who met or exceeded the ACS guidelines are listed in Table 3. General compliance with the guidelines for Mississippi physicians exceeded the national study's compliance results in all areas of cancer screening, including proctoscopic examinations and use of mammography. Notable state-specific practices are described below.

3. *Specific Screening Procedures.*

Colorectal Cancer

Rectal Examination/Stool Guaiac Testing. Seventy-one percent of Mississippi respondents met or exceeded ACS guidelines in performing rectal exams, compared to 53% of physicians in the nationwide study. For asymptomatic patients over age 50, almost two thirds of state physicians perform stool occult blood testing annually, compared with 45% of nationally surveyed physicians.

Sigmoidoscopy. In terms of the frequency of sigmoidoscopic examination, 54% of Mississippi physicians met or exceeded the ACS recommendations. Of those who performed sigmoidoscopy in their practices, 77% advised that initial screening procedure be done at or before age 50. Sigmoidoscopy was personally performed by one-third of state physicians, with 72% using the 60cm scope and 47% using the 35cm scope. Only 22% reported using the traditional rigid proctoscope. Reasons most often cited for not using the newer flexible instrument were that the procedure was done by others in the community (56%) or a lack of training (48%). Almost 40% of primary care physicians expressed an interest in learning to do flexible sigmoidoscopy.

Breast Cancer

Breast Physical Examination/Mammography. Eighty-seven percent of the state's surveyed physicians encourage monthly breast self-examination for female patients. Over 95% perform breast examinations on women over age 20 at recommended intervals. However, less than half follow ACS guidelines for age-specific screening mammography, with only 38% of all physicians advising annual screening for women age 50 and over. This low compliance is despite the fact that 83% of physicians reported that mammography was available in their practice community, or within 25 miles (37%). One-fifth (21%) of surveyed general and family practitioners stated that mammography was available only over 50 miles from their practice sites. Forty-two percent of all respondents replied that the cost of mammography was between \$75 and \$100; 12% reported a cost of over \$125.

Gynecologic Cancer

Pelvic Examination/Pap Testing. In accord with national survey results, 96% of state physicians met or exceeded ACS guidelines for the recommended frequency of pelvic examinations for asymptomatic women age 20-40. For women over 40, 85% also met or exceeded ACS guidelines. Pap testing was also done more often than recommended for women age 20-40 with no history of cancer and two recent negative Pap smears one year apart. Seventy-two percent of all physicians still perform Pap smears annually on these women. Eighty-five percent of all physicians adhere to the practice of annual Pap smears for women over age 40.

Endometrial Tissue Sampling. ACS guidelines endorse this procedure for all asymptomatic women at menopause or those at high risk (see Table 1). While compliance in this category was not analyzed in the national survey, the majority of state physicians (with the exception of OB/GYNs) reported that they do not customarily perform endometrial sampling unless a woman has a history of abnormal uterine bleeding.

Lung Cancer

Chest X-ray. Only 27% of Mississippi physicians surveyed do *not* recommend routine chest x-rays. Seventy-three percent still report using the test as a screening procedure for pulmonary carcinoma. Although the ACS found that 58% of all physicians agreed with their recommendations about the use of chest x-rays, both studies indicate a strong reluctance to abandon the practice.

Sputum Cytology. The ACS does not advise this

TABLE 3
PERCENT OF MISSISSIPPI PHYSICIANS WHO MEET OR EXCEED ACS GUIDELINES

<i>Test or Procedure</i>	<i>All M.D.'s (n = 481)</i>	<i>General Practice (n = 77)</i>	<i>Family Practice (n = 205)</i>	<i>Internal Medicine (n = 115)</i>	<i>Ob/Gyn (n = 84)</i>
Sigmoidoscopy	54	53	66	60	15
Stool Guaiac Slide Test	63	36	71	81	45
Digital Rectal Exam	71	55	63	82	87
Pap Test	97	97	99	90	100
Pelvic Examination	91	90	95	80	99
Endometrial Tissue Sampling	18	10	16	8	44
Breast Self-Exam	88	82	89	84	85
Breast Physical Exam	97	92	97	96	99
Mammography	43	33	41	47	52
Chest X-Ray	27	13	25	18	59
Sputum Cytology	83	69	80	88	97
Health Counseling and Cancer Checkup	57	43	55	58	74

test for lung cancer screening.¹ Unlike the use of chest x-rays, 82% of state physicians agreed with this negative recommendation.

General Cancer Screening

Health Counseling and the Cancer Checkup. For asymptomatic patients age 20-40, 58% of state physicians recommend that health counseling and a cancer checkup be done every three years. For patients over age 40, 57% of state physicians surveyed follow ACS recommendations for yearly health counseling and cancer checkups.

Discussion

In 1987, over 4500 new cases of cancer were expected to occur in Mississippi — 1100 breast cancers, 1300 colorectal cancers, 1800 lung cancers, and 600 uterine cancers.² These four cancer sites accounted for almost half of the state's total number of new cancer cases for all sites, which included oral, prostate, gastric, pancreatic cancers and leukemias. Lung cancer was the leading site of estimated cancer deaths in the state, followed by colorectal cancer; lung cancer death estimates were three times higher than those for colorectal cancer and five times higher than the estimated number of deaths from breast cancer. Nationally, lung cancer remained the number one cause of all cancer deaths in males of all ages, followed by colorectal cancer. Breast cancer was responsible for the most cancer

deaths in women of all ages; lung cancer was an alarming second.

These state and national cancer statistics indicate a clear need for the primary care physicians' active involvement in early cancer detection. These physicians, by virtue of the nature of their practice, are the most accessible and available professionals to the widest base of Mississippi's population. National five year survival rates for all cancer sites unequivocally demonstrate prolonged survival in patients whose tumors are still localized when initially diagnosed, regardless of site. Early detection also reduces patient morbidity and enhances quality of life for these patients and their families.

It is encouraging to observe the high degree of compliance by Mississippi's physicians with the ACS Screening Guidelines. However, state physicians are not utilizing screening mammography effectively, despite the fact that it is both available and cost-effective. Respondents in this survey indicated that even in a predominantly poor and rural state, mammography is available within 25 miles of most primary care physicians' communities at an average cost of less than \$100. However, most respondents indicated that they individually referred less than 25 women a year from their practices for a screening mammogram. The average life expectancy of a woman in Mississippi is 76.59 years; the cumulative lifetime expense of screening mammography per ACS guidelines currently would total \$3600 (36

lifetime mammograms at \$100 each). The cumulative cost of total care for the management of one woman with advanced breast cancer can exceed \$3600 for one hospitalization. End results of the recently completed national Breast Cancer Detection Demonstration Project (BCDDP) emphasize the benefits of screening mammography for women in their forties as well as those in their fifties in cumulative survival rates.³

In colorectal cancer, state physicians are generally performing rectal exams as recommended, but not utilizing stool guaiac testing effectively in conjunction with the examination. Almost half (46%) of state respondents do not follow recommendations for age-specific sigmoidoscopies. However, many respondents are interested in learning to do sigmoidoscopies, and a majority of those who do their own are using the 60cm instrument. The American Academy of Family Physicians and the American Society of Gastroenterologists now offer a conjointly approved sigmoidoscopy training course for primary care physicians — information on this program is available through the AAFP or the UMC Department of Family Medicine.

All of the state physicians surveyed are exceeding ACS guidelines for pelvic examinations and Pap testing. This is probably because “the annual” pelvic exam, now firmly entrenched in public and professional consciousness, offers an excellent opportunity to screen women for other problems (hypertension, heart examination, immunization status, nutritional status, etc.).

A majority of the surveyed state physicians still cling to the use of the annual chest x-ray to detect “early” lung cancer. ACS data since the early 1980’s has discouraged this cost-ineffective “screening”

modality. In Mississippi, where lung cancer is the leading cause of all cancer deaths by a wide margin, it is more reasonable for physicians to channel their efforts into antismoking patient education campaigns. Excellent patient information programs are available through the ACS and the AAFP, which focus on helping patients to quit smoking as well as discouraging the habit in adolescents.

Preventive medicine, especially cancer screening, is a critical part of primary care physicians’ continuity of care responsibilities to their patients. Postgraduate training programs in the disciplines of Family Medicine, Internal Medicine and OB/GYN must teach well-documented cancer screening protocols to their residents, so they may incorporate them into their everyday practice. As stated in the BCDDP End Results, well-informed and well-motivated patients are the key to improving cancer outcomes, and all screening processes require the closest of interactions among the medical profession, detection technology, and the cooperation and alertness of patients. Cost-effective cancer screening can be accomplished in Mississippi hometowns by physicians who know their patients the best.

★★★

Dr. Phillips: 2500 North State Street (39216)

References

1. American Cancer Society: A survey of physicians’ attitudes and practices in early cancer detection. *Ca-A Cancer Journal for Clinicians*, 35(4), p. 197-213, July/August 1985.
2. Silverberg, C, and Lubera, J: Cancer statistics 1987. *Ca-A Cancer Journal for Clinicians*, 37(1), p. 14-15, January/February 1987.
3. Seidman, H, Gelb, SK, Silverberg, E, LaVerda, N, & Lubera, JA: Survival experience in the Breast Cancer Detection Demonstration Project. *Ca-A Cancer Journal for Clinicians*, 37(5), p. 258-290, September/October 1987.

The Treatment of Primary Dysmenorrhea with Flurbiprofen

KATHY S. GOOKIN, R.N., B.S.N.

KENNETH R. GRIFFIS, M.D.

RAMON P. MCGEHEE, M.D.

WINFRED L. WISER, M.D.

JOHN C. MORRISON, M.D.

Jackson, Mississippi

PRI-MARY DYSMENORRHEA is the most common gynecologic disorder encountered in an ambulatory setting. It affects approximately 50% of females after puberty, and about 10% of these are incapacitated for one to three days each month.¹ The etiology of primary dysmenorrhea has not been completely elucidated but investigations in the recent past have shown that the ratio of prostaglandin $F_2\alpha/PGE_2$ is elevated in women with dysmenorrhea. This fact led investigators to treat primary dysmenorrhea with anti-inflammatory agents such as aspirin or indomethacin.^{2,3} These methods were the first attempt at treating on a molecular basis this disorder, rather than trying to relieve the pain by symptomatic analgesia. Other non-steroidal inflammatory agents such as flufenamic acid, mefenamic acid, tolfenamic acid, naproxen sodium and ibuprofen have also been used in this disorder.⁴ While all of these agents have shown to be effective, they are not without significant side effects.^{2,4} For these reasons, other effective agents of this type with fewer side effects are being sought.

Flurbiprofen has been reported to be effective in the treatment of arthritis and in traumatic soft tissue injuries.⁵ It has also been used successfully with few side effects after dental surgery and to relieve episiotomy pain. The current study was undertaken to assess the efficacy of the fluorinated ibuprofen compound to assess the possibility of reduced side effects in the treatment of dysmenorrhea.

Materials and Methods

Forty-five women with primary dysmenorrhea

From the Department of Obstetrics and Gynecology, University Medical Center, Jackson, MS.

TABLE 1
STUDY DESIGN DOUBLE-BLIND, TRIPLE CROSS-OVER

Group I	Flurbiprofen	Aspirin	Placebo
Group II	Aspirin	Placebo	Flurbiprofen
Group III	Placebo	Flurbiprofen	Aspirin

were enrolled in this study and received on three successive painful menstrual cycles each of the three study medications which were assigned in sequence, but with the starting drug being randomly distributed by medication code. As shown on Table 1, the first group received flurbiprofen the first month, aspirin the second and placebo the third month. Group II, on the other hand, began with aspirin, then received the placebo followed by the flurbiprofen. The final group was administered the placebo initially, then the flurbiprofen compound and lastly, aspirin. Thirty-one patients completed the study (9 in Group I, 10 in Group II, and 12 in Group III). The patients were examined to rule out causes of secondary dysmenorrhea. They were also interviewed prior to the initiation of the study medication, at which time the initial report form was completed. At the onset of painful menstrual period, the patient began the study medication given as two identical tablets four times a day with food. This regimen was continued until the pain was relieved. If pain relief was not sufficient, the patient was allowed to take supplementary medication which was reported at the follow-up visit. On the final visit, the patients were asked to rank the medications in order of efficacy. For each cycle, patient preference, the degree of pain relief and the use of

supplemental analgesics were recorded. In addition, the number of days of menstrual flow were also noted.

Results

Table 2 shows the baseline characteristics of the 31 study patients in the three groups. The average age was 26.4 years, and just over one-half had never been pregnant. The majority of patients had regular cycles. Only 12 patients had symptoms beginning before the day of bleeding and the symptoms usually lasted an average of 2.35 days. The duration of menstrual flow was 4.77 days and 94% of the patients reported moderate or heavy flow. Almost one-half of the patients employed no contraceptive.

TABLE 2
PATIENT CHARACTERISTICS

Age	26 ± 6 years
Height	64 ± 3.5 cm
Weight	129 ± 16.7 lbs
Blood Pressure	71 ± 9 mm Hg (Dias)
Gravidity	0.77 ± 1.0
Parity	0.67 ± 1.0
Race (C/B)	18/13
Length of Cycle	28 ± 2.47 days
Regular Cycles	89%
Duration of Flow	4.77 ± 1.2 days

TABLE 3
PATIENT PREFERENCE

		Total
Flurbiprofen versus Placebo		
25	6	30 (P < 0.002)
Flurbiprofen versus Aspirin		
22	9	30 (P < 0.05)
Aspirin versus Placebo		
19	12	30 (NS)

TABLE 4
DEGREE OF PAIN RELIEF

	Flurbiprofen	Aspirin	Placebo
No Relief	7	15	20
> 50% Relief	17	12	9
Complete Relief	7	4	2
Total	31	31	31

F-P P < 0.0001
A-P P < 0.05
F-A P < 0.01

TABLE 5
USE OF OTHER ANALGESICS

	Flurbiprofen	Aspirin	Placebo
Yes	7	12	17
No	24	19	14
Total	31	31	31

F-P P < 0.005

TABLE 6
SIDE EFFECTS

	Flurbiprofen	Aspirin	Placebo
Nausea	2	0	0
Sleepiness	1	0	0
Tingling	1	0	0
Dizziness	0	0	1
Leg Cramps	0	0	1

Of the 30 patients who were able to rank the medications, 20 (66.7%) ranked flurbiprofen first over aspirin and placebo. As shown on Table 3, this was statistically significant ($P > .002$ and $> .05$). Aspirin was also preferred when compared to the placebo, but the difference was not statistically significant.

Table 4 demonstrates the degree of pain relief. The majority of patients during the aspirin and placebo cycle were afforded no relief, while most of the patients exhibited significantly less pain during the flurbiprofen cycle ($P > .025$). When pair-wise comparisons were performed, flurbiprofen was significantly superior to placebo ($P > .0001$) and to aspirin ($P > .01$). Table 5 demonstrates the use of supplemental analgesics. It shows that flurbiprofen was significantly superior to the placebo ($P > .05$) and aspirin ($P > .02$).

Table 6 demonstrates that six patients noted side effects during this study. Four were in the flurbiprofen cycle but were minor. They included two patients with nausea, one with sleepiness and one who noted tingling in the upper extremities. Two cases of side effects, dizziness and leg cramps, were noted in the placebo group while none were found in the aspirin group.

Discussion

Several studies have clearly shown that prostaglandin inhibitors, particularly the non-steroidal anti-

inflammatory agents, are effective in relieving pain associated with dysmenorrhea.^{2, 3, 6} It appears the mechanism of pain relief is the reduction in the ratio of prostaglandin F_{2α} to prostaglandin E₂. Many authors have found good results with aspirin and indomethacin, although the side effects have been as much as 25%.^{2, 3} Moreover, the non-steroidal, anti-inflammatory agents seem to have fewer side effects when used in patients with dysmenorrhea.^{3, 4, 6}

It was hoped, based on earlier studies, that use of fluorinated ibuprofen would further reduce the incidence of side effects. As can be seen with the results, this was not the case. Although the side effects were minimal, they were more numerous than in those patients receiving aspirin or placebo (difference not significant). On the other hand, flurbiprofen did appear to be an effective analgesic agent for women with primary dysmenorrhea. This agent was also shown to be more effective than placebo when the degree of pain relief and supplemental analgesic agents were compared. Therefore, in this cross-over study of flurbiprofen, compared to aspirin and placebo in the treatment of dysmenorrhea, the test drug appeared to clearly be superior to the other two agents in the relief of pain. These results are similar to those previously found with ibuprofen and the other non-steroidal, anti-inflammatory agents. ★★

Dr. Morrison: 2500 North State Street (39216)

Acknowledgement

Supported in part by the Vicksburg Hospital Medical Foundation.

References

1. Nicholls ET, Morrison JC: Epidemiologic, social and economic factors of dysmenorrhea. In MY Dawood (ed.), Dysmenorrhea. Williams and Wilkins, 1981.
2. Morrison JC, Jennings JC: Primary dysmenorrhea treated with indomethacin. South Med J 72:425-428, 1979.
3. Halbert D, Demers L: A clinical trial of indomethacin and ibuprofen in dysmenorrhea. J Reprod Med 21:219-224, 1978.
4. Ylikorkala O, Dawood MY: New concepts in dysmenorrhea. Am J Obstet Gynecol 130:833-847, 1978.
5. Mena HR, Good AE: Management of ankylosing spondylitis with flurbiprofen or indomethacin. South Med J 70:945-947, 1977.
6. Morrison JC, Ling FW, Forman EK, et al: Analgesic efficacy of ibuprofen for treatment of primary dysmenorrhea. South Med J 73:999-1003, 1980.

YOCON® YOHIMBINE HCl

Description: Yohimbine is a 3a-15a-20B-17a-hydroxy Yohimbine-16a-carboxylic acid methyl ester. The alkaloid is found in Rubaceae and related trees. Also in Rauwolfia Serpentina (L) Benth. Yohimbine is an indolalkylamine alkaloid with chemical similarity to reserpine. It is a crystalline powder, odorless. Each compressed tablet contains (1/12 gr.) 5.4 mg of Yohimbine Hydrochloride.

Action: Yohimbine blocks presynaptic alpha-2 adrenergic receptors. Its action on peripheral blood vessels resembles that of reserpine, though it is weaker and of short duration. Yohimbine's peripheral autonomic nervous system effect is to increase parasympathetic (cholinergic) and decrease sympathetic (adrenergic) activity. It is to be noted that in male sexual performance, erection is linked to cholinergic activity and to alpha-2 adrenergic blockade which may theoretically result in increased penile inflow, decreased penile outflow or both.

Yohimbine exerts a stimulating action on the mood and may increase anxiety. Such actions have not been adequately studied or related to dosage although they appear to require high doses of the drug. Yohimbine has a mild anti-diuretic action, probably via stimulation of hypothalamic centers and release of posterior pituitary hormone.

Reportedly, Yohimbine exerts no significant influence on cardiac stimulation and other effects mediated by B-adrenergic receptors, its effect on blood pressure, if any, would be to lower it; however no adequate studies are at hand to quantitate this effect in terms of Yohimbine dosage.

Indications: Yocon® is indicated as a sympatholytic and mydriatic. It may have activity as an aphrodisiac.

Contraindications: Renal diseases, and patient's sensitive to the drug. In view of the limited and inadequate information at hand, no precise tabulation can be offered of additional contraindications.

Warning: Generally, this drug is not proposed for use in females and certainly not be used during pregnancy. Neither is this drug proposed for use in pediatric, geriatric or cardio-renal patients with gastric or duodenal ulcer history. Nor should it be used in conjunction with mood-modifying drugs such as antidepressants, or in psychiatric patients in general.

Adverse Reactions: Yohimbine readily penetrates the (CNS) and produces a complex pattern of responses in lower doses than required to produce peripheral a-adrenergic blockade. These include, anti-diuresis, a general picture of central excitation including elevation of blood pressure and heart rate, increased motor activity, irritability and tremor. Sweating, nausea and vomiting are common after parenteral administration of the drug.^{1,2} Also dizziness, headache, skin flushing reported when used orally.^{1,3}

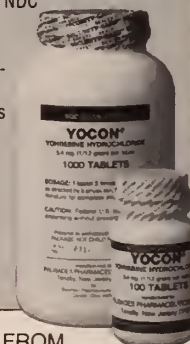
Dosage and Administration: Experimental dosage reported in treatment of erectile impotence.^{1,3,4} 1 tablet (5.4 mg) 3 times a day, to adult males taken orally. Occasional side effects reported with this dosage are nausea, dizziness or nervousness. In the event of side effects dosage to be reduced to 1/2 tablet 3 times a day, followed by gradual increases to 1 tablet 3 times a day. Reported therapy not more than 10 weeks.³

How Supplied: Oral tablets of Yocon® 1/12 gr. 5.4 mg in bottles of 100's NDC 53159-001-01 and 1000's NDC 53159-001-10.

References:

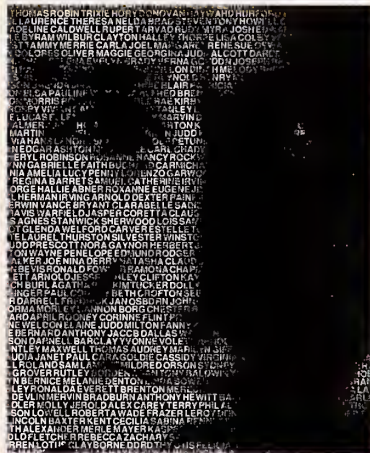
1. A. Morales et al., New England Journal of Medicine: 1221, November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

Rev. 1/85



AVAILABLE EXCLUSIVELY FROM
**PALISADES
PHARMACEUTICALS, INC.**
219 County Road
Tenafly, New Jersey 07670
(201) 569-8502
Outside NJ 1-800-237-9083

(PROPRANOLOL HCl)
LONG ACTING CAPSULES 60, 80, 120, 160 mg



[illegible]

ON

...like the more than one million patients who have received **INDERAL® LA**.

In a recent survey, 4,120 participating physicians gave us their views¹ on **INDERAL LA** in the treatment of hypertension, angina and migraine.

INDERAL LA is their preferred beta blocker

...of the nearly three out of four physicians responding to the questionnaire, an impressive 97% rated **INDERAL LA** good to excellent for overall performance. Virtually all cited efficacy, tolerability, long-term cardiovascular protection and once-daily convenience as important factors in their choosing to prescribe **INDERAL LA**.

INDERAL LA promotes patient compliance

...Virtually every responding physician rated patient satisfaction with **INDERAL LA** to be as good as, or better than, other beta blockers.

Like conventional **INDERAL** Tablets, **INDERAL LA** should not be used in the presence of congestive heart failure, sinus bradycardia, cardiogenic shock, heart block greater than first degree and bronchial asthma.

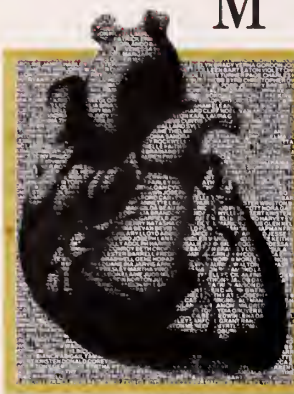
ONCE-DAILY
INDERAL® LA
 (PROPRANOLOL HCl)
 LONG ACTING CAPSULES
 60, 80, 120, 160 mg

The one you know best keeps looking better

Please see next page for brief summary of prescribing information.

ROBERT KRISTEN ARNOLD
 ARCUS RHODA JEREMY
 LIAN FLOYD ELLIOTT HAR
 Y MYRA JOSH EDWARD
 AMY MERRIE CARLA JO
 LEY IRIS STEPHANIE CHA
 A JESSICA BERNARD MA
 E BLAIR PATRICIA MIL
 ANNON MORRIS BOND
 AHAM ELEANORE GIN
 MORE CLAY PEARCE G
 NICOLE PETUNIA HA
 LEE CHERYL ROBINS
 ERVIN HUNTER NEVIN
 RTLAND COLEMAN
 ER PAINE JANE SH
 AWLEY KATHERINE
 E IRMA MYLES JULI
 E NETTE LAUREL TH
 RANDALL PHYLLIS
 RION JULIUS GLEN
 JESSE ASHLEY CLIF
 ANCHE ROBIN JACQ
 RK NOAH STEWART
 ORINNE FLINT PRESL
 RON NORTON JULIE
 SHIRLEY HARPER PE
 OLDIE CASSIDY VIRGI
 LYDIA GROVER RUTL
 ISIBYL NOEL HUMPHR
 L BILL LILLIAN MARLE
 ADE FRAZER LEROY DO
 S MEREDITH ALEXAND
 ESMOND TONY HILARY
 ERTA LEONORA BART
 ENNIS CULLEN TABIT
 RENDAN GUNTHER E
 MARIO JAYNE MELIS
 SPER VITO NICHOLA
 Y JONATHAN SALLY
 ON SEAN WALDEN RO
 RT DIANE JENNIFER LE
 LLEEN DWIGHT MITCH
 INGRID CHANNING LIN
 ANSON ANDREW GALL
 ER ROXANNE ASHBY HAR
 A TRIXIE RORY BAYARD CH
 JOSEPH PAGE JULIE REX REY
 LEONA RUDY MARCUS SLOAN E
 RA DONNA CRAIG ANNE ELMER F
 RAM ADELINE HALLEY MIL FORD DE
 ON PRISCILLA WILSON RUPERT HARF
 ATH STEVEN BRONSON JEAN PETER DIAN
 E LORNA ROBERTA NOBLE TOM SABIN
 T MIA BARTLETT BEAU DINAH JIM FRITZ D
 ENE CECILIA TAMARA BEN ROSABELLE JU
 LE SIMPSON BERNARD ERROL CORETTA
 VERETT MARGO LENA LORENZO CLIFF RI
 N MARTIN THOMAS TONY COLEMAN LUCI
 DEN REBECCA COURTNEY NICOLE BREWS
 ER RHONDA TURNER MADELINE ELL EN MO
 OWLER JANET TONY THOMAS ROBERTSO
 T ROBIN HARDEN BRETT NEIL BORDEN OT
 T WATSON GEORGIA BARCLAY ODESSA
 ADWICK APRIL TODD ARDEN LAUR
 MABEL SHERWIN PATIDA GINA
 ARD ARNOLD HILLIARD SILVES
 ORA DONAHUE EGAN MURRA
 AMDEN EDNA MILES ALBER
 RUSSEL AUDREY ELI DEWE
 ROLD TONY WILFRED CL
 DAM TYSON LARISSA A
 ON LIBBY OSCAR PHY
 OYD PHOEBE ARCH
 IS FRANKLIN LOT
 M RENE ECHA
 AN ZELDA
 AS MEGA
 Y CRY
 SHEE

feel like a
MILLION



ONCE-DAILY
INDERAL[®] LA
(PROPRANOLOL HCl) LONG ACTING CAPSULES
60, 80, 120, 160 mg

The one you know best
keeps looking better



BRIEF SUMMARY (FOR FULL PRESCRIBING INFORMATION, SEE PACKAGE CIRCULAR.)

INDERAL[®] LA brand of propranolol hydrochloride (Long Acting Capsules)

DESCRIPTION. Inderal LA is formulated to provide a sustained release of propranolol hydrochloride. Inderal LA is available as 60 mg, 80 mg, 120 mg, and 160 mg capsules.

CLINICAL PHARMACOLOGY. Inderal is a nonselective, beta-adrenergic receptor-blocking agent possessing no other autonomic nervous system activity. It specifically competes with beta-adrenergic receptor-stimulating agents for available receptor sites. When access to beta-receptor sites is blocked by Inderal, the chronotropic, inotropic, and vasodilator responses to beta-adrenergic stimulation are decreased proportionately.

Inderal LA Capsules (60, 80, 120, and 160 mg) release propranolol HCl at a controlled and predictable rate. Peak blood levels following dosing with Inderal LA occur at about 6 hours and the apparent plasma half-life is about 10 hours. When measured at steady state over a 24-hour period the areas under the propranolol plasma concentration-time curve (AUCs) for the capsules are approximately 60% to 65% of the AUCs for a comparable divided daily dose of Inderal Tablets. The lower AUCs for the capsules are due to greater hepatic metabolism of propranolol, resulting from the slower rate of absorption of propranolol. Over a twenty-four (24) hour period, blood levels are fairly constant for about twelve (12) hours then decline exponentially.

Inderal LA should not be considered a simple mg-for-mg substitute for conventional propranolol and the blood levels achieved do not match (are lower than) those of two to four times daily dosing with the same dose. When changing to Inderal LA from conventional propranolol, a possible need for retitration upwards should be considered especially to maintain effectiveness at the end of the dosing interval. In most clinical settings, however, such as hypertension or angina where there is little correlation between plasma levels and clinical effect, Inderal LA has been therapeutically equivalent to the same mg dose of conventional Inderal as assessed by 24-hour effects on blood pressure and on 24-hour exercise responses of heart rate, systolic pressure, and rate pressure product. Inderal LA can provide effective beta blockade for a 24-hour period.

INDICATIONS AND USAGE. **Hypertension:** Inderal LA is indicated in the management of hypertension; it may be used alone or used in combination with other antihypertensive agents, particularly a thiazide diuretic. Inderal LA is not indicated in the management of hypertensive emergencies.

Angina Pectoris Due to Coronary Atherosclerosis: Inderal LA is indicated for the long-term management of patients with angina pectoris.

Migraine: Inderal LA is indicated for the prophylaxis of common migraine headache. The efficacy of propranolol in the treatment of a migraine attack that has started has not been established and propranolol is not indicated for such use.

Hypertrophic Subaortic Stenosis: Inderal LA is useful in the management of hypertrophic subaortic stenosis, especially for treatment of exertional or other stress-induced angina, palpitations, and syncope. Inderal LA also improves exercise performance. The effectiveness of propranolol hydrochloride in this disease appears to be due to a reduction of the elevated outflow pressure gradient which is exacerbated by beta-receptor stimulation. Clinical improvement may be temporary.

CONTRAINDICATIONS. Inderal is contraindicated in 1) cardiogenic shock; 2) sinus bradycardia and greater than first-degree block; 3) bronchial asthma; 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with Inderal.

WARNINGS. **CARDIAC FAILURE:** Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or Inderal should be discontinued (gradually, if possible).

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following abrupt discontinuance of Inderal therapy. Therefore, when discontinuance of Inderal is planned, the dosage should be gradually reduced over at least a few weeks, and the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If Inderal therapy is interrupted and exacerbation of angina occurs, it is usually advisable to reinstitute Inderal therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

Nonallergic Bronchospasm (eg, chronic bronchitis, emphysema)—PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD IN GENERAL NOT RECEIVE BETA BLOCKERS. Inderal should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

MAJOR SURGERY: The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

Inderal (propranolol HCl), like other beta blockers, is a competitive inhibitor of beta-receptor agonists and its effects can be reversed by administration of such agents, eg, dobutamine or isoproterenol. However, such patients may be subject to protracted severe hypotension. Difficulty in starting and maintaining the heartbeat has also been reported with beta blockers.

DIABETES AND HYPOLYCEMIA: Beta blockers should be used with caution in diabetic patients if a beta-blocking agent is required. Beta blockers may mask tachycardia occurring with hypoglycemia, but other manifestations such as dizziness and sweating may not be significantly affected. Following insulin-induced hypoglycemia, propranolol may cause a delay in the recovery of blood glucose to normal levels.

THYROTOXICOSIS: Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol may change thyroid function tests, increasing T₄ and reverse T₃, and decreasing T₃.

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

PRECAUTIONS. GENERAL: Propranolol should be used with caution in patients with impaired hepatic or renal function. Inderal (propranolol HCl) is not indicated for the treatment of hypertensive emergencies.

Beta-adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be told that Inderal may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

CLINICAL LABORATORY TESTS: Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

DRUG INTERACTIONS: Patients receiving catecholamine-depleting drugs such as reserpine should be closely observed if Inderal (propranolol HCl) is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension.

Caution should be exercised when patients receiving a beta blocker are administered a calcium-channel-blocking drug, especially intravenous verapamil, for both agents may depress myocardial contractility or atrioventricular conduction. On rare occasions, the concomitant intravenous use of a beta blocker and verapamil has resulted in serious adverse reactions, especially in patients with severe cardiomyopathy, congestive heart failure, or recent myocardial infarction.

Aluminum hydroxide gel greatly reduces intestinal absorption of propranolol.

Ethanol slows the rate of absorption of propranolol.

Phenytin, phenobarbital, and rifampin accelerate propranolol clearance.

Chlorpromazine, when used concomitantly with propranolol, results in increased plasma levels of both drugs.

Antipyrine and lidocaine have reduced clearance when used concomitantly with propranolol.

Thyroxine may result in a lower than expected T₃ concentration when used concomitantly with propranolol.

Cimetidine decreases the hepatic metabolism of propranolol, delaying elimination and increasing blood levels.

Theophylline clearance is reduced when used concomitantly with propranolol.

CARCINOGENESIS, MUTAGENESIS, IMPAIRMENT OF FERTILITY: Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

PREGNANCY: Pregnancy Category C. Inderal has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximum recommended human dose.

There are no adequate and well-controlled studies in pregnant women. Inderal should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

NURSING MOTHERS: Inderal is excreted in human milk. Caution should be exercised when Inderal is administered to a nursing woman.

PEDIATRIC USE: Safety and effectiveness in children have not been established.

ADVERSE REACTIONS. Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

Cardiovascular: Bradycardia; congestive heart failure; intensification of AV block; hypotension; paresis of hands; thrombocytopenic purpura; arterial insufficiency, usually of the Raynaud type.

Central Nervous System: Light-headedness; mental depression manifested by insomnia, lassitude, weakness, fatigue; reversible mental depression progressing to cataplexy; visual disturbances; hallucinations; vivid dreams; an acute reversible syndrome characterized by disorientation for time and place, short-term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics. For immediate formulations, fatigue, lethargy, and vivid dreams appear dose related.

Gastrointestinal: Nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis.

Allergic: Pharyngitis and agranulocytosis, erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress.

Respiratory: Bronchospasm.

Hematologic: Agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura.

Auto-immune: In extremely rare instances, systemic lupus erythematosus have been reported.

Miscellaneous: Alopecia, LE-like reactions, psoriasis-like rashes, dry eyes, male impotence, and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin, serous membranes and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.

DOSAGE AND ADMINISTRATION. Inderal LA provides propranolol hydrochloride in a sustained-release capsule for administration once daily. If patients are switched from Inderal Tablets to Inderal LA Capsules, care should be taken to assure that the desired therapeutic effect is maintained. Inderal LA should not be considered a simple mg-for-mg substitute for Inderal. Inderal LA has different kinetics and produces lower blood levels. Retitration may be necessary, especially to maintain effectiveness at the end of the 24-hour dosing interval.

HYPERTENSION—Dosage must be individualized. The usual initial dosage is 80 mg Inderal LA once daily, whether used alone or added to a diuretic. The dosage may be increased to 120 mg once daily or higher until adequate blood pressure control is achieved. The usual maintenance dosage is 120 to 160 mg once daily. In some instances a dosage of 640 mg may be required. The time needed for full hypertensive response to a given dosage is variable and may range from a few days to several weeks.

ANGINA PECTORIS—Dosage must be individualized. Starting with 80 mg Inderal LA once daily, dosage should be gradually increased at three- to seven-day intervals until optimal response is obtained. Although individual patients may respond at any dosage level, the average optimal dosage appears to be 160 mg once daily. In angina pectoris, the value and safety of dosage exceeding 320 mg per day have not been established.

If treatment is to be discontinued, reduce dosage gradually over a period of a few weeks (see WARNINGS).

MIGRAINE—Dosage must be individualized. The initial oral dose is 80 mg Inderal LA once daily. The usual effective dose range is 160-240 mg once daily. The dosage may be increased gradually to achieve optimal migraine prophylaxis. If a satisfactory response is not obtained within four to six weeks after reaching the maximal dose, Inderal LA therapy should be discontinued. It may be advisable to withdraw the drug gradually over a period of several weeks.

HYPERTROPHIC SUBAORTIC STENOSIS—80-160 mg Inderal LA once daily.

PEDIATRIC DOSAGE—At this time the data on the use of the drug in this age group are too limited to permit adequate directions for use.

*The appearance of these capsules is a registered trademark of Ayerst Laboratories.

Reference:

1. Data on file, Ayerst Laboratories.

D7295/188

WYETH
AYERST
PHILADELPHIA, PA 19101

© 1988, Wyeth-Ayerst Laboratories.

Radiological Seminar CCXLX: Herpes Simplex Encephalitis — CT Findings

T. GERALD GATES, M.D.*

JAMES U. MORANO, M.D.

Jackson, Mississippi

TYPE 1 herpes simplex encephalitis is a common cause of nonepidemic encephalitis. Herein, we report such a case and discuss the role of CT in its diagnosis.

Case Report

A 20-year-old white male experienced seizures and headache following a drinking binge. His medical history was remarkable only for a history of minor head trauma three years earlier and a history of heavy ethanol consumption. Physical examination including neurologic evaluation was normal except for an elevated temperature of 100° F. Routine hematology, blood chemistry, and urinalysis revealed a polymorphonuclear leukocytosis (15,900 WBC/mm³) but was otherwise normal. An initial uncontrasted CT head scan was normal. Analysis of cerebrospinal fluid [CSF] obtained from a lumbar puncture revealed an elevated cell count of 144 WBC/mm³ (90% lymphocytes) and 64 RBC/mm³. A gram stain of the CSF revealed no bacteria. CSF protein was mildly elevated (53 mg/dl).

The patient was admitted to the hospital and began experiencing hallucinations on the second day following onset of symptoms. Blood and CSF cultures obtained on admission proved negative. The patient had persistent temperature elevations to 101-102° F., and he became intermittently agitated and disoriented. An uncontrasted CT head scan obtained on the fourth day was again normal.

On the tenth day CT head scans were obtained, without and following intravenous contrast administration. These revealed a large hypodense area involving most of the right temporal lobe with modest mass effect and effacement of the right lateral

ventricle (see Figure 1). This area showed patchy, mostly peripheral, enhancement on the contrasted study (see Figure 2).

On the following day the patient underwent a craniotomy and right temporal lobe biopsy. A diagnosis of herpes simplex encephalitis was confirmed by light and electron microscopy of tissue removed at biopsy and subsequent positive herpes virus culture. The patient responded well to intravenous acyclovir therapy and was discharged approximately 29 days after admission.

Discussion

Type 1 herpes simplex encephalitis causes a severe necrotizing meningoencephalitis which characteristically begins in the temporal lobes. It is associated with a high morbidity and mortality rate, especially in cases where therapy is delayed. Four typical CT findings have been described in herpes simplex encephalitis. These include low density changes, mass effect, contrast enhancement, and hemorrhage.

Temporal lobe low density changes are the most common CT abnormality in herpes simplex encephalitis. This finding may be bilateral; and there may be frontal, parietal, and occipital involvement as well.¹⁻³ Abrupt transition from low to normal density at the lateral border of the lenticular nucleus is said to be suggestive of herpes simplex encephalitis.^{2, 3}

Mass effect is a less consistent finding than low density abnormalities, but it may be the initial finding. Mass effect may be localized or diffuse, and midline shift is variably present.¹⁻³ Diffuse cerebral edema has also been reported.³ Contrast enhancement is another variable finding and has been described as gyral in configuration or as linear streaks at the periphery of a low density lesion.¹⁻³ Enhance-

Sponsored by the Mississippi Radiological Society.
From the Department of Radiology, University Medical Center,
Jackson, MS.

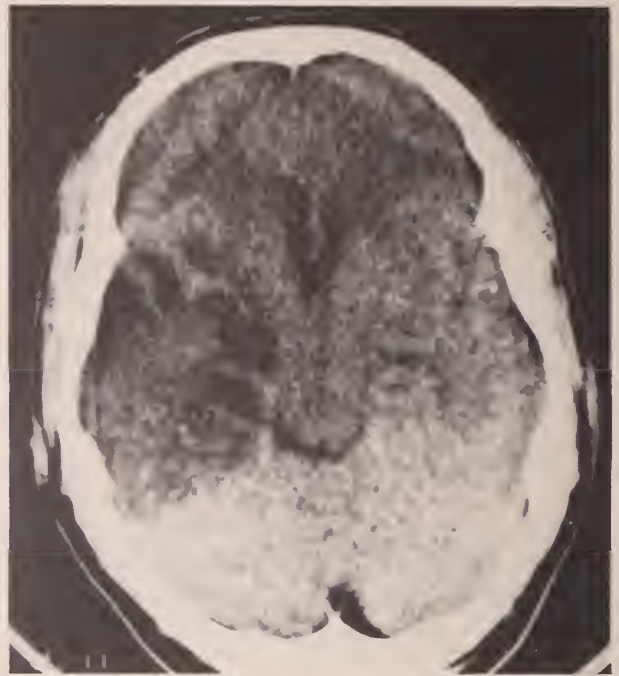
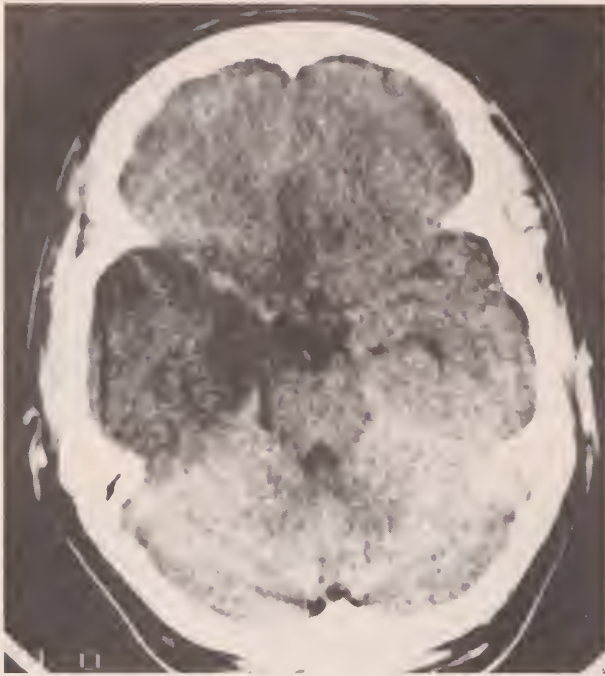


Figure 1. CT head scan without contrast. There is abnormal low density throughout the right temporal lobe with modest mass effect.

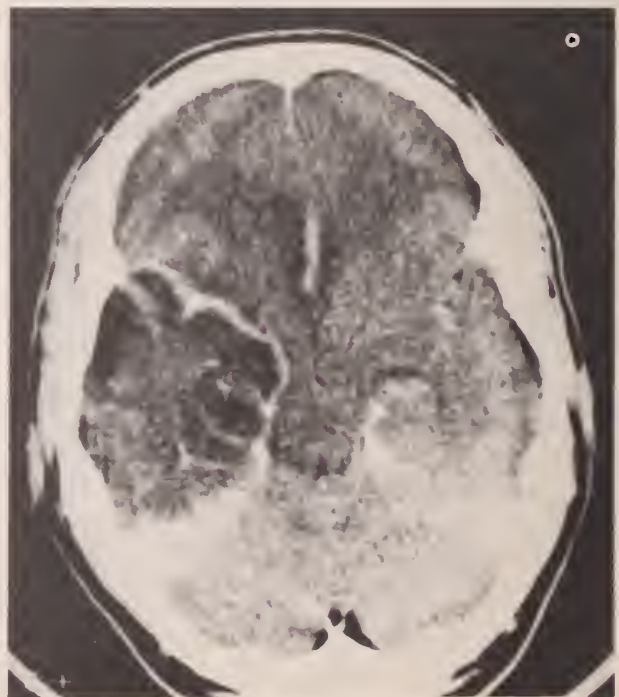


Figure 2. CT head scan following IV contrast. Abnormal low density is again seen throughout the right temporal lobe. Abnormal contrast enhancement is seen about the peripheral margins of this lesion. Less intense streaky, curvilinear areas of abnormal enhancement can be seen within the lesion.

ment may be present in the absence of a low density lesion.¹ Subarachnoid enhancement has also been described as indicative of meningeal involvement. CT evidence of hemorrhage in the form of a well defined hyperdense mass or poorly defined area of increased density has been reported in herpes simplex encephalitis.² It has been suggested that small areas of hemorrhage may be obscured on CT by intense associated edema.³

The CT findings described above are suggestive of herpes simplex encephalitis, but are not pathognomonic for the disease. In addition, none of the findings described above may be present on early scans, and a normal CT scan prior to the fifth day following onset of symptoms does not exclude the

diagnosis.^{1, 3} Although the CT scan can be supportive of the suspected diagnosis, the specific diagnosis must continue to rely on clinical and laboratory data.

★★★

2500 North State Street (39216)

References

1. Davis JM, Davis KR, Kleinman GM, Kirchner HS, Taveras JM: Computed tomography of herpes simplex encephalitis, with clinicopathologic correlation. *Radiology* 129:409-417, 1978.
2. Enzmann DR, Ranson B, Norman D, Talberth E: Computed tomography of herpes simplex encephalitis. *Radiology* 129:419-425, 1978.
3. Zimmerman RD, Russell EJ, Leeds NE, Kaufman D: CT in the early diagnosis of herpes simplex encephalitis. *AJR* 134:61-66, 1980.

PHYSICIANS, THERE ARE TWO KINDS OF FLEXIBILITY IN THE ARMY RESERVE WE THINK YOU'LL LIKE.

One, time. We know how tough it is for a busy physician to make weekend time commitments. So we offer flexible training programs that allow a physician to share some time with his or her country. We arrange a schedule to suit your requirements.

Two, the opportunity to explore other phases of medicine, to add a different kind of knowledge—the challenge of military health care. It's a flexibility which could prove to be both stimulating and rewarding, with the opportunity to participate in a variety of programs that can put you in contact with medical leaders from all over the country.

See how flexible we can be, call our Army Medical Personnel Counselor:

MAJ MEL VAN DYKE
(504) 522-1977/1978

BE ALL YOU CAN BE.
ARMY RESERVE.



The President Speaking

FANTASIES

W. LAMAR WEEMS, M.D.
Jackson, Mississippi

*In the Spring a young man's fancy
lightly turns . . .*

Alfred Lord Tennyson

I trust that it is okay, even for the President, to be a little flaky this time of year. After all, spring fever is epidemic. And besides, daydreaming is a fine Southern tradition which deserves to be defended. Building air castles sometimes is equated with shiftlessness by unimaginative people. Writers have created a familiar stereotype of southern gentry living too much in the past. Contrary to these negative images, the tradition of abstract thinking has, for example, given the world some pretty good southern writers like William Faulkner who said about his own private thoughts, "I created a cosmos of my own."

Imaginative people may often be closer to the secrets of successful living than their pragmatic brethren who only deal with reality. Of course, it is possible to be too absent minded, but psychologists say that the thoughts of normal people are elsewhere 10 to 20 percent of the time. In that case, the "elsewhere" mental experience is probably of great social importance. There is cause for concern about a culture in which children stay glued to television sets instead of playing make believe, in which young people flood their brains continuously with the incessant blare of rock music, and in which escapes from reality at all ages are often drug induced. Quiet reverie is becoming a lost art. The loss may not be inconsequential.

Imagination is a powerful tool for living; an important coping mechanism, a problem solving capability, and an aid in creativity. Genius, says psychologist Perry Buffington in an article, "Strokes of Genius," may be nothing more than a certain style of thinking — a style which is not very different from that of the common person. Much like any average person, a genius, a Beethoven or an Einstein, develops ideas via incremental critical thinking and a special type of worry. Efficient problem solvers "creatively worry" and carry a problem around with them even while doing other tasks.

Creative worry as described may be an essential component of the genius of the medical profession, both in research and in patient care as well. On a mundane level, in my own practice it

(Continued on page 126)

Patients Caught In Medicare Crossfire

By now most physicians have received the "Dear Doctor" letter from Medicare (The Travelers' Companies) regarding the recently enacted Omnibus Budget Reconciliation Act of 1987, and some have begun to feel the effects of that Act by being denied payment for diagnostic services rendered. I have yet to find a patient who has received a "Dear Patient" letter from Medicare informing them of the changes and what they, as patients, should and should not expect from their insurance company.

It is the distinct prerogative of Medicare, or any other third party agent, to offer any coverage it desires, or refuse any coverage it desires. Not having this information places the patient in a direct crossfire between Medicare and physicians. Uninformed patients are now being mailed letters stating that Medicare is denying payment for diagnostic services because they were unnecessary. These letters strongly suggest that the physician was acting irresponsibly in ordering the test.

Upon receipt of such a letter patients become irate at the physician and in some cases have threatened legal action for "unnecessary procedures." It is extremely difficult to explain that the unnecessary procedure ruling was made by another party, one who was not present and had absolutely no idea of the immediate situation at the time the patient was examined. It is also difficult to explain to patients that this denial seems to be primarily a vindictive action by the government directed toward non-participating physicians.

It is even more difficult to explain to patients why Medicare is no longer interested in preventive med-

icine. For several years, numerous governmental agencies and private insurance companies have developed elaborate information and educational programs on preventive medicine. They have supported and conducted health fairs, blood pressure screening examinations, cholesterol screening examinations and numerous athletic events designed to encourage preventive health measures. Now Medicare comes along and is directly refusing to pay for such studies.

As stated earlier, the patient is caught in a direct crossfire between the government and the physicians. It would be very helpful if the government would explain their position to the Medicare beneficiaries in a direct and appropriate manner and not have to resort to the use of harassing techniques as developed in this recent Act.

MYRON W. LOCKEY, M.D.
Editor

COMMENT

Judiciary Has Impact On Medical Liability Insurance

Much has been said in recent years concerning the ever-expanding problem of availability and affordability of Medical Professional Liability (malpractice) insurance. Trial lawyers say the problem lies with incompetent doctors and greedy insurance companies. Doctors and insurance companies blame unscrupulous lawyers for the increasing number of lawsuits filed each year and unrealistically benevolent juries for the constantly growing awards to injured patients.

To some extent, all of the above are correct in

their assessment of the problem. There are incompetent doctors practicing medicine in Mississippi, and everywhere else, but these doctors are, in reality, few and far between and are finding it more and more difficult to obtain malpractice insurance. Without insurance, they cannot maintain hospital staff privileges, and without the ability to admit patients to the hospital, their practice is substantially diminished. The truth of the matter is that most claims being paid by insurance carriers are the result of honest mistakes made by highly competent doctors, who, despite all of their training and all of their caring, are still human, and imperfect.

Insurance companies are not completely without fault, either. All too often claims that are totally without merit are "compromised" for an amount less than the cost of defending them in Court. This philosophy saves money in the short term, but is counter-productive in the long run, because it encourages the filing of meritless claims.

Commercial insurance companies are in the business to make a profit, just like most other businesses. If they cannot make a profit, they get out of the business — sometimes voluntarily, often-times not. Those that decide to withdraw from the medical malpractice market have a duty and an obligation to their stockholders, not to the doctors they insure; they should not be criticized for making sound business decisions. The fact that the doctor-owned malpractice carriers, who are non-profit by design and do have a duty and an obligation to the doctors they insure, are also imposing annual rate increases just to stay in business, indicates that at least some of the criticism aimed at the commercial carriers may be unjustified.

While there are certainly unscrupulous lawyers, just as there are incompetent doctors practicing in Mississippi, the unfortunate truth is that a relatively few who resort to unethical, and sometimes illegal, tactics to extort money from insurance companies are giving a bad name to the vast majority of the members of the legal profession who sincerely feel that their client, whether plaintiff or defendant, is right. These attorneys, because they believe in the justness of their case and in the integrity of their profession, do not indulge in unethical, immoral, or illegal practices to "win at all costs." Although they will not always win (the very nature of the system dictates that half of them must lose), those attorneys who have presented their cases in an honorable and competent manner leave the courtroom

knowing that their conduct is primarily responsible for making the American judicial system, while far from perfect, the best system in the world.

This brings us to what this writer considers to be a significant contributory cause of the problem. Not the jurors, not even the judicial system but the jurists, the judges. True, jurors sometimes base their verdicts on sympathy, but not very often. True, jurors sometimes award outrageously generous amounts of money damages, but not very often. At least, they do not in Mississippi — yet. What seems to have been overlooked is the fact that the presiding judge has considerable influence on the typical juror's decision-making process. One of the duties of the judge is to be certain that jurors realize and accept that sympathy is not to be a basis for determining fault. If a verdict is rendered on the basis of sympathy, the judge has failed, not the jury. Judges also have the authority, and the responsibility, to correct jury verdicts that are obviously based on sympathy or bias. They can reverse the verdict, they can order a new trial, they can add to the amount awarded, or they can reduce the amount awarded.

"Almost every medical malpractice case that was properly dismissed by the judge in the past four years has been reversed by the Mississippi Supreme Court, and new law made."

The fact that Mississippi jurors have apparently based very few awards on sympathy and have rarely rendered unrealistically high verdicts, combined with the fact that judges have seldom had to exercise their authority to change a jury verdict, indicates that the jurors and trial judges in Mississippi are doing their respective jobs well. How long they can continue to do well, however, remains to be seen.

It must be particularly difficult for a judge to preside over a trial at this time, because the laws pertaining to civil, and criminal, justice seem to change every week. More and more judges are seeing their cases being reversed and sent back for retrial, not because the judge improperly interpreted or applied a precedent, but because the Mississippi Supreme Court simply changed the law retroactively to reflect the liberal viewpoints of a few Justices.

Since the purpose of this letter was to discuss the medical malpractice problem in Mississippi, I shall limit my examples of changing laws to issues involving medical negligence. In recent years the Mississippi Supreme Court has:

1. Changed the standard of care by which Mississippi doctors are to be judged from a local standard to a national standard. The effect of this change was to allow "hired guns" to come to Mississippi from New York, Philadelphia, Baltimore, etc. to testify against Mississippi doctors,
2. Made hospitals responsible for actions of doctors contracted to staff emergency rooms,
3. Made physicians responsible for the negligent acts of nurses employed by a hospital even if the alleged negligence involved failure to call the physician,
4. Held family practitioners who treat fractures to the same standard of care as orthopedic surgeons, and
5. Imposed a duty on a doctor to review the chart and locate and return a patient to the hospital after that patient had been previously treated and discharged from the hospital by another doctor.

Almost every medical malpractice case that was properly dismissed by the judge in the past four years has been reversed by the Mississippi Supreme Court, and new law made. The above examples, individually, would have minimal impact on the burgeoning malpractice insurance problem; some may even be in the best interest of the public. The point is that *every* change made by the Supreme Court recently has increased the standards by which the health care providers are to be judged, shifted the burden of proof from the plaintiff to the defendant, made it much easier for the plaintiff to get to a jury and, consequently, greatly expanded the possibility for insurance carriers to be hit with large judgements, moving the Mississippi judicial system closer and closer to a "lottery" status as now exists in Dade County, Florida, Cook County, Illinois, and New York City.

Perhaps the most vivid example of the liberal attitude of our Supreme Court involves a recent case wherein the trial judge dismissed the lawsuit because the plaintiff/patient could not find a doctor who would testify that the antibiotic prescribed by the doctor/defendant was improper. The old argument of a "conspiracy of silence" among doctors no longer holds water (see example 1 above); the truth of the matter is that not even a "hired gun" would testify that the prescription was in error. The plaintiff attorney therefore retained a faculty member from the University of Mississippi Medical School who had a master's degree in pharmacology and toxicology as a medical expert, and the judge properly dismissed the case on the basis of long-

standing law that only a doctor can testify as a medical expert relative to the standard of care required in a medical malpractice case against another doctor.

The Supreme Court reversed the trial judge, saying that all that is necessary now to establish the standard of care is to find someone who purports to "possess medical knowledge, however obtained." Now someone who has never prescribed medication, never treated a reaction to medication, and has no practical experience as to the effect of a particular medication on the human body is considered by our Supreme Court to be "at least equally competent" as a physician to testify concerning the effect that a certain drug would have on the human body. Supreme Court Justice Dan M. Lee, in his dissenting opinion, very aptly pointed out that the majority was so determined to reach a given result that it ignored several pertinent facts.

Perhaps the only aspects of the above-described decision that leave any room for a glimmer of hope are that (1) the Supreme Court was divided 5 to 4 on the decision, and (2) Mississippi Supreme Court Justices are elected officials and two of the Justices who concurred with this decision come up for re-election soon.*

Maybe it is now time for the medical profession, as well as the other health care providers and the business community, to become more active in judicial elections. The trial lawyers have been involved in such elections for years, and the purpose of their involvement was never more clearly defined than in a recent election for Supreme Court Justice. The president of the Mississippi Trial Lawyers Association sent a letter to all members requesting that they contribute their time and money to help get a certain judge elected because "he will make you money." They did, and he was elected.

Think about that the next time there is a judicial election in your area. If you are not sure of any candidate's judicial record, check with your local attorney. Remember, the judiciary in this state definitely have a profound impact on the affordability and the availability of malpractice insurance.

MIKE D. HOUP
Medical Assurance Co. of Mississippi

* Editorial note: It appears that both of these justices will be re-elected without opposition this fall.

MEETINGS

National and Regional

American Medical Association, Annual Meeting, June 26-30, 1988, Chicago. James H. Sammons, Executive Vice President, 535 N. Dearborn St., Chicago, IL 60610.

State and Local

Mississippi State Medical Association, 120th Annual Session, June 15-19, 1988, Biloxi. Charles L. Mathews, Executive Secy., 735 Riverside Drive, P.O. Box 5229, Jackson 39216.

Mississippi Academy of Family Physicians, Annual Meeting, July 27-30, 1988, Biloxi. Mrs. Alyce Palmore, Executive Secy., P.O. Box 12330, Jackson 39211.

Amite-Wilkinson Counties Medical Society, 3rd Monday, March, June, September, December. James S. Poole, Secy., The Gloster Clinic, Gloster 39638. Counties: Amite, Wilkinson.

Central Medical Society, 1st Tuesday, February, April, October, December, 6:30 p.m., Primos Northgate Restaurant, Jackson. Patsy Douglas, Executive Secy., 735 Riverside Dr., Jackson, MS 39202. Counties: Hinds, Leake, Madison, Rankin, Scott, Simpson.

Claiborne County Medical Society, 1st Tuesday, each month, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Secy., P.O. Box 147, Port Gibson 39150. County: Claiborne.

Clarksdale and Six Counties Medical Society, 3rd Wednesday, April, and 1st Wednesday, November, 2:00 P.M., Clarksdale, Rodney Baine, Secy., 110 Yazoo Ave., Clarksdale 38614. Counties: Coahoma, Quitman, Tallahatchie, Tunica.

Coast Counties Medical Society, January, May, and November. H. S. Barrett, Secy., P.O. Box 1810, Gulfport 39501. Counties: Hancock, Harrison, Stone.

Delta Medical Society, 2nd Wednesday, April and October. Walter H. Rose, Secy., 122 E. Baker St., Indianola 38751. Counties: Bolivar, Humphreys, Leflore, Sunflower, Washington, Yazoo.

DeSota County Medical Society, 3rd Thursday, February and August, 1:00 p.m., Kenny's Restaurant, Hernando. Malcolm D. Baxter, Jr., Secy., Baxter Clinic, Hernando 38632. County: DeSoto.

East Mississippi Medical Society, 1st Tuesday, February, April, June, October, December. Charles L. Wilkinson, Secy., Mail: Ms. Jenkins, P.O. Box 4053, Meridian 39305. Counties: Clarke, Kemper, Lauderdale, Neshoba, Newton, Winston.

Homochitto Valley Medical Society, Meetings scheduled quarterly. Fred G. Emrick, Secy., P.O. Box 1488, Natchez 39120. Counties: Adams, Jefferson.

North Central District Medical Society, 3rd Wednesday, March, June, September, January. George V. Smith, 905 Avent Dr., Grenada 38901. Counties: Attala, Carroll, Choctaw, Granada, Holmes, Montgomery, Webster.

Northeast Mississippi Medical Society, 1st Thursday, March, June, September, December. Roger L. Lowery, Secy., 618 Pegram Dr., Tupelo 38801. Counties: Alcorn, Calhoun, Chickasaw, Itawamba, Lee, Monroe, Pontotoc, Prentiss, Tishomingo, Union.

North Mississippi Medical Society, 1st Thursday, April, September, December. W. A. Spencer, Secy., 2161 South Lamar, Oxford 38655. Counties: Benton, Lafayette, Marshall, Panola, Tate, Tippah, Yalobusha.

Pearl River County Medical Society, 2nd Monday, March, June, September, December. J. C. Griffing, Secy., Crosby Memorial Hospital, Picayune 39466. County: Pearl River.

Prairie Medical Society, 2nd Tuesday, March, June, September, December. Perrin N. Smith, Secy., P.O. Box 9000, Columbus 39705. Counties: Clay, Oktibbeha, Noxubee, Lowndes.

Singing River Medical Society, meet quarterly. Owen P. Phillips, Secy., 208 Doctors Plaza, Pascagoula 39567. County: Jackson.

South Central Mississippi Medical Society, 2nd Tuesday, March, June, September, December. Julian T. Janes, Secy., 304 Clark, McComb 39648. Counties: Copiah, Franklin, Lawrence, Lincoln, Pike, Walthall.

South Mississippi Medical Society, 2nd Thursday, March, June, September, December. George R. Bush, Secy., 307 S. 13th Ave., Laurel 39440. Counties: Covington, Forrest, George, Greene, Jasper, Jefferson Davis, Jones, Lamar, Marion, Perry, Smith, Wayne.

West Mississippi Medical Society, 2nd Tuesday, January, March, May, September, October, November, 6:30 p.m., Maxwell's Restaurant, Vicksburg. Wayne M. Petrie, Secy., 1202 Mission Park Dr., Vicksburg 39180. Counties: Issaquena, Sharkey, Warren.

Mississippi Institutions and Organizations Accredited for Continuing Medical Education

The following Mississippi institutions and medical organizations have been accredited in accordance with the "Essentials for Accreditation of Institutions and Organizations Offering Continuing Medical Education Programs" of the Liaison Committee on Continuing Medical Education. Information concerning CME programs for physicians offered by these accredited sources may be obtained by writing the Director, Continuing Medical Education, at the individual institution or organization.

Council on Scientific Assembly Mississippi State Medical Association 735 Riverside Drive Jackson, MS 39202	Northwest Mississippi Regional Medical Center Box 1218 Clarksdale, MS 38614
North Mississippi Medical Center 830 Gloster Avenue Tupelo, MS 38801	North Panola County Hospital Drawer 160 Sardis, MS 38666
Forrest General Hospital Box 1897 Hattiesburg, MS 39401	Singing River Hospital P.O. Box 112 Pascagoula, MS 39567
Mississippi Baptist Medical Center 1225 N. State Street Jackson, MS 39201	Magnolia Hospital Alcorn Drive Corinth, MS 38834
Gulf Coast Community Hospital 4642 W. Beach Boulevard Biloxi, MS 39531	Greenwood Leflore Hospital 1508 Leflore Avenue Greenwood, MS 38930
Jefferson Davis Memorial Hospital Box 1488 Natchez, MS 39120	Gulfport Memorial Hospital 4500 13th Street Gulfport, MS 39501
King's Daughter Hospital Box 948 Brookhaven, MS 39601	Oxford-Lafayette County Hospital P.O. Box 946 Oxford, MS 38655
Riverside Hospital Lakeland Drive Jackson, MS 39208	St. Dominic-Jackson Memorial Hospital 969 Lakeland Dr. Jackson, MS 39216
Biloxi Regional Medical Center 1559 Lafayette St. Biloxi, MS 39533	Delta Medical Center P.O. Box 5247 Crossroads Station Greenville, MS 39704-5247
Jeff Anderson Regional Medical Center 2124 14th St. Meridian, MS 39301	Methodist Hospital P.O. Box 1311 Hattiesburg, MS 39401

MEDICAL ORGANIZATION

MSMA Annual Session Begins June 15 in Biloxi

The 120th Annual Session of the MSMA will get underway June 15 at the Royal d'Iberville Hotel in Biloxi. The schedule for the five-day meeting includes scientific programs, House of Delegates sessions, alumni reunions, technical and scientific exhibits, and a number of fellowship events.

Dr. William Hotchkiss, president of the American Medical Association, will be among special guest speakers during the week. He will address the House of Delegates on Thursday morning.

Mark Shields, nationally syndicated columnist and television political commentator, will be featured speaker at the MSMA/MSMA Auxiliary Membership Banquet on Friday evening. Shields is noted for his combination of wit and wisdom in entertaining and thought-provoking talks.

For the first time, the two major scientific programs will be held on the same day. By decision of the Council on Scientific Assembly, the Surgery Plenary Session will be conducted on Friday morning and the Medicine Plenary Session will be held that afternoon.

The Surgery Plenary Session is jointly presented by MSMA and the American College of Surgeons, Mississippi Chapter. Coordinating the program are Dr. James Hughes, chairman of the MSMA Surgery Planning Group, and Dr. Ralph Abraham, president of the Mississippi Chapter, ACS. The program includes: "Cardiac Risk Assessment in Peripheral Vascular Surgery," by Robert S. Rhodes, M.D.; "A Rational Approach to the Treatment of Thyroid Cancer," by Norman C. Nelson, M.D.; "AIDS and HIV Infection," by F. E. Thompson, M.D.; "Autotransfusion — Postoperative Use," by David B. Stephens, M.D.; Interpretation of the Pap Smear," by Ramon P. McGee, M.D.; "Federal Medical Regulations: A Cannon Out of Control," by Richard Field, Jr.; "Compartment Syndrome," by Robert S. Rhodes, M.D.; and "Internal Fixation vs. Traction and Casting in the Treatment of Ad-

olescent Femoral Shaft Fractures," by Brad Reeves, M.D.

The Medicine Plenary Session, coordinated by Dr. Billy W. Long, chairman, is entitled "Symposium in Contemporary Geriatrics." Among speakers will be Richard J. Ham, M.D., of Syracuse University of New York, who will present the James Grant Thompson Memorial Lecture, an overview of geriatrics. Other speakers and topics include: "Skin Tumors in the Elderly," by Ralph Daniel, III, M.D.; "Health Care and the Elderly in Nursing Homes: Quality Care and Standards," by Mendal Kemp; "Management of the Incontinent Patient," by Rodney Meeks, M.D.; and "Cognitive Impairment in the Elderly: Management and Family Issues," by Roger J. Cadieux, M.D. Dr. Cadieux will also present "The Use of Psychoactive Drugs in the Elderly" at a luncheon hosted by the Mississippi Psychiatric Association to which MSMA members are invited.

The Saturday schedule of events begins with the annual meeting of the Young Physicians Section. According to Dr. George McGee, chairman, the program will include an update on state and national legislation. The YPS meeting will be followed by the annual meeting of the MSMA Hospital Medical Staff Section, directed by Dr. Bill Gates, chairman. Phil Manning, M.D., of Los Angeles, will present "Decision Making in Clinical Practice in the Year 2000: The Impact of Technology." The session also will include hands-on database demonstrations.

The list of special events during the Annual Session includes the 65th annual session of the MSMA Auxiliary, the annual meetings of the Mississippi Foundation for Medical Care and Medical Assurance Company of Mississippi, along with meetings of various medical specialty societies. Alumni groups from Ole Miss, Tulane and Millsaps have scheduled functions during the week. MSMA members and families will also have the opportunity to participate in the annual fishing rodeo and golf and tennis tournaments.

The 120th Annual Session will conclude on Sunday morning with a Continental breakfast, Protestant and Catholic church services, and the final session of the House of Delegates.

MSMA members are encouraged to make plans now to attend. Watch for more information to be published in next month's *Journal MSMA* and in upcoming issues of the "MSMA Report."

Dr. Warren Bell Honored At UMC Reception



Dr. Warren Bell, center, professor of clinical laboratory sciences and chairman of the department at the University of Mississippi Medical Center, retired in January, and he and Mrs. Bell were honored with a reception. UMC vice chancellor Dr. Norman Nelson presented a citation. Dr. Bell joined the University faculty in 1954 and was one of the first faculty members on the premises of the Medical Center.

Dr. Wesley Pitts Joins UMC Faculty

Dr. Wesley McArthur Pitts, Jr., has been named associate professor of psychiatry and human behavior at the University of Mississippi Medical Center. Dr. Norman C. Nelson, UMC vice chancellor for health affairs and dean of the School of Medicine announced his appointment following approval by the Board of Trustees of State Institutions of Higher Learning.

Dr. Pitts earned the B.S. in 1971 at Clemson University and the M.D. in 1975 at the University of South Carolina. He took his internship in medicine at Charity Hospital and a psychiatry residency in 1979 at Baylor College of Medicine. He also completed a fellowship in psychopharmacology research in 1980 at Baylor, where he was assistant professor of psychiatry from 1980-1984. During that time, he also directed the clinical psychiatric research unit at the Houston Veterans Administration Hospital.

Dr. Pitts was assistant professor of psychiatry at Quillen-Dishner College of Medicine at East Tennessee State University, medical director of the psychiatric outpatient clinic and domicile liaison psychiatrist at the Veterans Administration Medical Center at Mountain Home, Tennessee, before coming to UMC.



Doctor,

Have you ever looked for a different way to say "Thank You," "Congratulations," or "Get Well Soon"?

All of these messages are available, along with memorial tributes, in greeting cards from the MSMA Auxiliary. Each card signifies your donation to the AMA-ERF in the name of a friend or colleague.

For information about AMA-ERF greeting cards for year-round use, contact a member of your local MSMA Auxiliary, or Kathy Carmichael, 106 Colonial Place, Hattiesburg, MS 39401; telephone 268-9642.

POSTGRADUATE CALENDAR

DIAGNOSIS AND TREATMENT OF INFECTIONS IN DI- ABETES MELLITUS

April 16
Ramada Renaissance Hotel, Jackson

FAMILY PRACTICE UPDATE

April 27-30
Ramada Renaissance Hotel, Jackson

OBSTETRICS-NEWBORN UPDATE

April 27-28
Broadwater Beach Hotel, Biloxi

MISSISSIPPI PERINATAL ASSOCIATION ANNUAL MEETING

April 29
Broadwater Beach Hotel, Biloxi

May

RENAL UPDATE

May 5-7
Ramada Inn Coliseum, Jackson

ADVANCE TRAUMA LIFE SUPPORT PROVIDER COURSE

May 19-20
University Medical Center

MISSISSIPPI NEUROLOGICAL SOCIETY ANNUAL MEETING

June 10-11
Ramada Renaissance Hotel, Jackson

For more information or a program brochure,
contact the University of Mississippi Medical Cen-
ter Division of Continuing Health Professional Ed-
ucation, 2500 North State Street, Jackson, Missis-
sippi 39216-4505; or call (601) 984-1300.

"A Sign of the Times!"



SALES — SERVICE — LEASING

HARRELD CHEVY-OLDS

354-2233

NEW MEMBERS

ADAMS, THOMAS FLOYD, Columbus. Born Caleva, AL, Dec. 26, 1954; M.D., Howard University College of Medicine, Washington, DC, 1982; interned and pediatrics residency, same, 1982-86; elected by Prairie Medical Society.

ALLGOOD, JOHN M., Moss Point. Born Birmingham, AL, Sept. 29, 1955; M.D., University of South Alabama College of Medicine, Mobile, 1982; interned and family practice residency, Baptist Memorial Hospital, Gadsden, AL, 1982-85; elected by Singing River Medical Society.

ATHAR, MOHAMMAD, Jackson. Born Sykkmr, Pakistan, July 1, 1951; M.D., Liaquat Medical College, Hyderabad, Pakistan, 1973; interned and radiology residency, University of Illinois, Chicago, 1975-80; elected by Central Medical Society.



*At the
Millsaps Buie House, our
bed and breakfast accommodations
recall those graceful days before the
turn of the century.
Whether business or pleasure
brings you to Jackson, our home
and our hearts are yours.*



601 352-0221
628 North State Street, Jackson, MS 39202
A 19th century urban retreat for the 20th century traveler

BUSH, FRED A. McKissic, Jackson. Born Pine Bluff, AR, Feb. 25, 1947; M.D., University of Mississippi College of Medicine, Jackson, 1983; interned and ob-gyn residency, University of Tennessee Center for Health Sciences, Memphis, 1983-87; elected by Central Medical Society.

CALLENDER, WILLIAM RAY, JR., Tylertown. Born Magnolia, MS, March 29, 1951; M.D., University of Mississippi College of Medicine, Jackson, 1981; interned and family practice residency, USAF Regional Hospital, Carswell AFB, Texas, 1981-84; elected by South Central Medical Society.

COBB, THOMAS J., Starkville. Born Lexington, MS, Aug. 6, 1957; M.D., University of Mississippi College of Medicine, Jackson, 1983; interned and ob-gyn residency, University of Tennessee, Memphis, 1983-87; elected by Prairie Medical Society.

COSBY, WALTER N., Columbus. Born Memphis, Oct. 7, 1955; M.D., University of Tennessee College of Medicine, Memphis, 1981; interned and general surgery and otolaryngology residency, Methodist Hospital, Memphis, 1981-86; elected by Prairie Medical Society.

CURRIE, CHARLES M., Tupelo. Born Poplar Bluff, MO, May 22, 1953; M.D., St. Louis University School of Medicine, St. Louis, MO, 1981; radiology residency and fellowship in neuroradiology, Vanderbilt University Hospital, Nashville, 1981-86; elected by Northeast Mississippi Medical Society.

DAVIS, FRANK E., Columbus. Born Atlanta, Aug. 14, 1953; M.D., Medical College of Georgia, Atlanta, 1979; interned and general surgery residency, Memorial Medical Center, Savannah, GA, 1979-84; elected by Prairie Medical Society.

DAVIS, J. T. JR., Oxford. Born Cleveland, OH, July 27, 1937; M.D., University of Mississippi School of Medicine, Jackson, 1963; interned, general surgery residency and cardiovascular and thoracic residency, University Medical Center, Jackson, 1963-69; thoracic and cardiovascular residency, St. Vincent Charity Hospital, Cleveland, OH, 1969-70; elected by North Mississippi Medical Society.

DEMETROPOULOS, STEVEN LEE, Pascagoula. Born Mobile, AL, Nov. 6, 1957; M.D., University of Alabama School of Medicine, Birmingham, 1984; interned, one year, Caraway Medical Center, Birmingham; emergency medicine residency, University Hospital, Jacksonville, FL, 1985-87; elected by Singing River Medical Society.

GILMORE, JAMES CURTIS, Oxford. Born Houston, TX, June 9, 1953; M.D., University of Mississippi School of Medicine, Jackson, 1980; interned, general surgery residency, Mayo Clinic, Rochester, MN, 1980-85; cardiovascular surgery residency, Ochsner Clinic, New Orleans, 1985-87; elected by North Mississippi Medical Society.

HANSON, RAE RICHARD, Jackson. Born Toronto, Ontario, Canada, 1976; interned William Beaumont AMC, El Paso, one year; pediatric residency, Walter Reed AMC, Washington, DC, 1979-81; child neurology, same 1981-84; elected by Central Medical Society.

HARISDANGKUL, VALEE, Jackson. Born Bangkok, Thailand, June 20, 1941; M.D., Mahidol University School of Medicine, Bangkok; interned, one year, same; medicine residency, University Medical Center, Jackson, MS, 1977-79; rheumatology fellowship, Michael Reese Medical Center, Chicago, 1976-77, and Hospital for Spinal Surgery, New York, NY, 1971-73; elected by Central Medical Society.

HICKS, JULIE T., Columbus. Born Little Rock, AR, July 22, 1957; M.D., University of Tennessee School of Medicine, 1982; pathology residency, Baptist Memorial Hospital, Memphis, 1982-86; elected by Prairie Medical Society.

HICKS, RICKEY LYNN, Columbus. Born Lake City, TN, June 26, 1956; M.D., University of Tennessee School of Medicine, Memphis, 1982; interned and pathology residency, Baptist Memorial Hospital, Memphis, 1982-87; elected by Prairie Medical Society.

JENKINS, MORGAN, Vicksburg. Born Chicago, Sept. 18, 1955; M.D., University of California School of Medicine, San Francisco, 1984; interned and one year pediatric residency, Boston City Hospital, Boston, MA, 1984-86; pediatric residency, University of California Medical Center, San Francisco, 1986-87; elected by West Mississippi Medical Society.

LIND, ROGER CHARLES, JR., Jackson. Born Ft. Bragg, NC, Jan. 25, 1953; M.D., University of Mississippi School of Medicine, Jackson, 1981; interned and one year medicine residency, 1981-83; radiology residency, University of Missouri Medical Center, Columbia, 1983-87; elected by Central Medical Society.

MARANTO, GREGORY STEVEN, Meridian. Born Greenville, MS, July 14, 1957; M.D., University of Mississippi School of Medicine, Jackson, 1984; interned and pediatric residency, Medical College

of Georgia Hospital and Clinic, Augusta, 1984-87; elected by East Mississippi Medical Society.

MEEKS, WILLIAM MARCUS, JR., Jackson. Born Ft. Benning, GA, Nov. 4, 1955; M.D., University of Mississippi School of Medicine, Jackson, 1982; interned and medicine residency, Medical College of Virginia, Richmond, 1982-85; elected by Central Medical Society.

MYERS, MITCHELL JEFF, Jackson. Born New York City, April 23, 1954; M.D., University of Mississippi School of Medicine, Jackson, 1983; interned and neurology residency, University Medical Center, Jackson, 1983-87; elected by Central Medical Society.

ORLEANS, FREDRICK STEVEN, Pascagoula. Born San Antonio, July 24, 1952; M.D., University of California School of Medicine, Los Angeles, 1982; interned, one year, and medicine residency, one year, University of Texas Medical Center, San Antonio; medicine and gastroenterology residency, Kansas University Medical Center, Kansas City, 1985-87; elected by Singing River Medical Society.

PRITCHARD, RONALD STEPHEN, Jackson. Born Russellville, AL, March 26, 1956; M.D., University of South Alabama School of Medicine, Mobile, 1981; interned, same, one year; diagnostic radiology residency, Baptist Medical Center, Birmingham, 1982-85; fellowship in interventricular radiology and MRI, same, 1985-86; elected by Central Medical Society.

PULLIAM, JOE STANLEY, Aberdeen. Born Okolona, MS, Aug. 19, 1960; M.D., University of Mississippi School of Medicine, Jackson, 1985; interned, one year, Saint Francis Hospital, Memphis; elected by Northeast Mississippi Medical Society.

RAY, LINDA ILENE, Jackson. Born Jackson, MS, Oct. 1, 1956; M.D., University of Mississippi School of Medicine, Jackson, 1982; interned and pediatric residency, University Medical Center, Jackson, 1982-85; ambulatory medicine, same, 1985-86; elected by Central Medical Society.

ROBERTSON, CHARLES RAY, JR., Tupelo. Born Meridian, MS, June 8, 1948; M.D., University of Mississippi School of Medicine, Jackson, 1975; interned and pediatric residency, University Medical Center, Jackson, 1975-78; ambulatory pediatrics residency, Children's Hospital, Boston, MA, 7/85-6/86; elected by Northeast Mississippi Medical Society.

NEW MEMBERS/Continued

ROCKHOLD, LINDA JO, Brandon. Born Corinth, MS, Sept. 23, 1950; M.D., University of Tennessee Center for the Health Sciences, Memphis, 1982; interned, one year, Baptist Memorial Hospital, Memphis; internal medicine residency and rheumatology fellowship, University Medical Center, Jackson, 1983-87; elected by Central Medical Society.

RODRIGUEZ, ALGEL A., Corinth. Born Cuba, May 13, 1954; M.D., University of Michigan Medical School, Ann Arbor, 1980; interned and anesthesia residency, Charity Hospital, New Orleans, 1980-83; elected by Northeast Mississippi Medical Society.

SESSUMS, MARION C., Hattiesburg. Born Jackson, MS, Aug. 7, 1957; M.D., University of Mississippi School of Medicine, Jackson, 1982; interned and ob-gyn residency, University Medical Center, Jackson, 1982-86; elected by South Mississippi Medical Society.

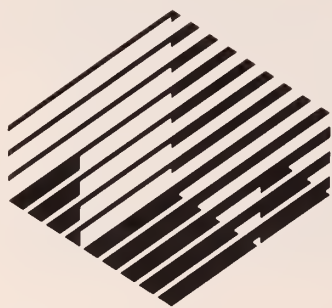
SHEFFIELD, JERRY WAYNE, Tupelo. Born Fulton, MS, Jan. 10, 1948; M.D., University of Mississippi School of Medicine, Jackson, 1973; interned, one year, St. Petersburg, FL; elected by Northeast Mississippi Medical Society.

SMITH, CHRISTOPHER E., Clinton. Born Parchman, MS, Dec. 18, 1957; M.D., University of Mississippi School of Medicine, Jackson, 1983; interned and pediatrics residency, Arkansas Childrens Hospital, Little Rock, 1983-86; elected by Central Medical Society.

SZABO, CHERYL J., Tupelo. Born Milwaukee, WI, July 26, 1951; M.D., University of Wisconsin Medical School, Madison, 1981; interned and family practice residency, St. Mary's Hospital, Madison, 1981-84; elected by Northeast Mississippi Medical Society.

STEWART, LAWRENCE E., McComb. Born New Orleans, May 11, 1956; M.D., University of Virginia School of Medicine, Charlottesville, 1982; interned and otolaryngology residency, Oklahoma University Health Sciences Center, Oklahoma City, 1982-87; elected by South Central Medical Society.

TILLMAN, BARRY FORREST, Natchez. Born Natchez, MS, Nov. 22, 1955; M.D., Washington University School of Medicine, St. Louis, MO, 1981; interned, medicine residency and pulmonary and allergy fellowship, Vanderbilt University Medical Center, Nashville, 1981-87; elected by Homochitto Valley Medical Society.



**We earn
your trust every day.™**



Trustmark™
National Bank

Jackson/Bogue Chitto/Brownhaven/Canton/Clinton/Columbia
Georgetown/Gloster/Greenville/Greenwood/Hattiesburg/Hazlehurst
Leland/Liberty/Madison/Magee/McComb/Pearl/Petal/Ridgeland
Tylertown/Wesson

Member FDIC

DEATHS

HAND, BENJAMIN F., Greenville. Born Meridian, MS, 1912; M.D., University of Tennessee School of Medicine, Memphis, 1937; interned, one year, Charity Hospital, Shreveport; died Jan. 12, 1988, age 75.

SHAHEEN, MICHAEL E., Como. Born Dover, NH, 1909; M.D., George Washington University School of Medicine, Washington, D.C., 1949; died Feb. 23, 1988, age 78.

WEBB, LESTER D., Calhoun City. Born Eupora, MS, Sept. 24, 1907; M.D., University of Tennessee School of Medicine, Memphis, 1950; interned, one year, St. Joseph's Hospital, Memphis; died Feb. 3, 1988, age 79.



WE'RE ALWAYS ON CALL. 1-800-352-2226

Call the travel specialists toll-free!

When you come down with the urge or necessity to travel, call Avanti for expert service. Everything we do for you is free of charge, even the phone call.

Our travel specialists will take care of all your plans, plane reservations, car rental, hotel accommodations and much more. We're here to help you with charters, tours, cruises, personal vacations, business meetings and conventions.

The next time you make travel arrangements, remember Avanti is always on call, toll-free.

AVANTI
TRAVEL, INC.

Three Lakeland Circle • Jackson, Mississippi 39216 • 981-9111
Call Toll-Free Nationwide 1-800-327-4236



“When I realized my chances of becoming disabled by age 65 were *three times greater* than the chances of death . . .

I compared disability insurance plans. And I decided that my MSMA-endorsed disability insurance plan

SERVES ME BEST!

It’s not group insurance, but an individually-owned policy which is *non-cancellable* and *guaranteed renewable*.”

If you’re a member of the Mississippi State Medical Association you may be eligible for this outstanding professional disability plan at *discounted premiums*.

- Non-cancellable, guaranteed renewable
- Medical specialty protection
- Presumptive loss provision
- Indexing of prior earnings
- Waiver of premium
- Cost of living rider
- Future disability insurance option
- Lifetime accident and sickness rider
- Total and residual disability protection

Offered by Paul Revere Insurance Company to MSMA members through its exclusive representatives, Professional Disability Specialists.

Jon B. Wimbish, Disability Specialist

1501 Lakeland Drive, Suite 200 Jackson, MS 39216 Telephone 362-9800

PERSONALS

RICHMOND L. ALEXANDER, III has associated with Meridian Medical Associates for the practice of pulmonary medicine and internal medicine.

VINOND ANAND of UMC presented a paper at a meeting in Birmingham of the Southern Section, American Academy of Facial Plastic and Reconstructive Surgery.

BLAIR BATSON of UMC was examiner for the American Board of Pediatrics in Denver.

DIANE BEEBE of UMC was speaker at the 1988 Postdoctoral Education Conference in Galveston.

BERNARD BLUMENTHAL of UMC presented a paper at the Southern Radiological Conference in Point Clear, Alabama.

RICHARD C. BORONOW of Jackson was Royal College Guest Lecturer for a symposium in Calgary, Alberta, Canada, which was sponsored by the Royal College of Physicians and Surgeons of Canada, the faculty of medicine of University of Calgary, and several gynecology and gynecologic oncology societies.

C. RON CANNON of Jackson presented a paper at the Southern Section meeting of the American Academy of Facial Plastic and Reconstructive Surgery in Birmingham, and spent a one-week fellowship on the subject of vocal rehabilitation of the laryngectomy patient at the Head and Neck Cancer Rehabilitation Institute in Indianapolis, Indiana.

MARC CHETTA of Poplarville spoke on AIDS at a meeting of the Picayune Junior High Parent/Teacher/Student Association.

BRYAN COWAN of UMC recently was guest lecturer at a meeting of the medical staff at Gulfport Memorial Hospital.

JAMES CROSTHWAIT, QUINTON DICKERSON AND JAMES HAYS of Jackson were featured speakers at Alpha Epsilon Delta's spring banquet at the University of Mississippi in Oxford. They spoke about the work of the late Dr. Jeff Hollingsworth and the scholarship endowment they have initiated as a memorial tribute to him.

J. T. DAVIS of Corinth spoke on the subject of polio at a meeting of the Corinth Rotary Club, in connection with Rotary International's emphasis, "Polio-Plus."

JOHN D. DRAKE of Ocean Springs was speaker at Magnolia Park Elementary School for a special educational unit on the skeletal system.

ALAN FREELAND of UMC was guest of honor at an Advanced AO/ASIF course in Davos, Switzerland.

PATRICK H. GILL of Macon has been recertified as a diplomate of the American Academy of General Practice.

JAMES GRIFFITH of UMC received the 1988 Innovative Therapy Award at the annual meeting of the Mississippi Division, American Association of Marriage and Family Therapy.

BOBBY HEATH of UMC presented a paper at the Southern Association for Vascular Surgery meeting in St. Thomas, Virgin Islands.

BENTON M. HILBUN of Tupelo recently was elected to membership in the Southern Surgical Association.

FRANK T. MARASCALCO of Clarksdale spoke on "Body Sculpturing through Liposuction Surgery" as part of the Women's Health Care Issues series at Delta State University.

PRINTING — OFFICE SUPPLIES

EQUIPMENT — FURNITURE



Premier Printing Company

2485 West Capitol

Jackson, Mississippi

Phone 352-4091

PERSONALS/Continued

A. E. McNAIR of Pascagoula was speaker for a workshop sponsored by the Jackson County Association for Sick Cell Disease.

JOHN MORRISON of UMC spoke at a meeting of the Southern Perinatal Association in New Orleans. He also made a presentation on Advances in Maternal-Fetal Medicine in Steamboat Springs, Colorado, and lectured at the Society of Perinatal Obstetricians in Las Vegas.

LEE ROY MURPHREE of Aberdeen announces the association of M. NEY WILLIAMS, JR. for the general practice of medicine.

NORMAN NELSON of UMC was a speaker at the 140th anniversary convocation at Ole Miss in Oxford.

PHIL O. NELSON of Jackson recently was elected president of the Southern Radiological Conference at the annual meeting in Point Clear.

WILLIAM NICHOLAS of UMC presented a paper at the meeting in New Orleans of the Society of General Internal Medicine, and presented a talk on osteoporosis at the Geriatric Conference held recently in Baton Rouge.

MICHAEL T. NICHOLSON has associated with Family Medical Associates in Meridian for the practice of family medicine.

RICHARD NOWELL of Jackson spoke on "Dealing with Loss" at Mississippi Baptist Medical Center's annual Pastoral Care Conference.

CHARLES O'MARA of Jackson presented a paper at the annual meeting of the Southern Association for Vascular Surgery in St. Thomas, Virgin Islands.

KELLY SEGARS, SR. of Iuka was guest speaker at the Flying Physicians Association meeting in Zermatt, Switzerland.

CHARLES STROBLE of Ocean Springs conducted a workshop on breast self-examination at Ocean Springs Hospital.

WILLIAM C. WARNER of Jackson spoke on "Conditioning and Fitness" at a meeting of the Lupus Foundation of America, Central Mississippi Chapter.

LAMAR WEEMS of UMC recently was honored as Alumnus of the Year at Millsaps College.

JERRY WELCH of Laurel was guest speaker at a recent meeting of the Greater Laurel Mothers of Twins Clubs.

President's Page

(Continued from page 112)

has often been helpful, in making difficult decisions, for me to assemble all the necessary data concerning a patient and to mull it over for a while. Things eventually seem to fall into place. Patients benefit when their doctor worries about them.

It is getting more and more difficult for doctors to creatively worry about patients these days. The 10 to 20 percent of the brain's operational time which is set aside for fantasy thoughts is getting crowded with concerns about rules and regulations, economic competition, law suits, etc. The public, which covets a "caring" medical profession, is standing mindlessly by while the collective psyche of their doctors is being brutalized. A poignant example is provided by an article written by a pediatrician in the May 25, 1987 issue of *Medical Economics* entitled, "Nothing Is So Lonely As Being Sued for Malpractice." "Driving home that evening," he said, "I kept going over and over the

case, imagining the opposing lawyers' questions and desperately seeking answers." "I had no idea how obsessed I'd be with the case over the next three months." "I had problems with early morning waking when my brain would churn the various aspects of the case." "The spectre of the upcoming hearing lurked just below the surface of my consciousness." Little room in such a beleaguered mind to creatively worry about sick kids.

The loss to society from disruption of the creative worry mechanism for problem solving in medicine is inestimable, of course. I wouldn't want to try to explain this concept to the members of the Mississippi Legislature as one of our arguments for tort reform, nor even to federal bureaucrats in opposition to all their onerous rules and regulations. It is much too fantastic for them to grasp. Nevertheless, if the real medical profession were asked to please stand up, it would probably be best and most accurately represented by an aggregate of the private thoughts, the fantasies, of all of its members. A wise man once said, "As a man thinks, so is he." A profession, too, in all probability.

PHYSICIANS, SCHEDULE SOME TIME FOR YOUR COUNTRY.

Many physicians would like to devote some time to their country in a local Army Reserve unit. We know that making a weekend commitment can be difficult for most physicians. So it is practical for the Army Reserve units to be flexible about time. It's worth discussing.

Incidentally, in addition to satisfying your own desire to serve your country, there are exceptional opportunities to do something totally different from a day-to-day routine. Opportunities to study new areas of medicine, meet new people in your specialty, and be a part of one of the world's most advanced medical teams.

Discuss the opportunities with our Army Medical Personnel Counselor.

FOR SURGEONS LOOKING FOR A CHALLENGE.

Your challenge could be the Army Reserve unit near you. It's a unit that requires the services of surgeons.

You may wish to explore the challenge of teaching in a major medical center. You may wish to explore the special challenges of your specialty in triage. Certainly you'll be confronted by challenges very different from your daily routine.

You'll also have an opportunity to participate in a number of programs in which you'll be able to exchange views and information with other surgeons from all over the country.

The Army Reserve understands the time demands on a busy physician, so you can count on us to be totally flexible in making time for you to share your specialty with your country. We'll arrange your training program to work with your practice.

To find out about the benefits of serving with a nearby Army Reserve unit, we recommend you call our Army Medical Personnel Counselor.

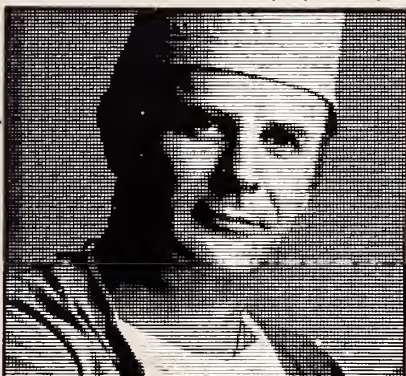
PHYSICIANS, THERE ARE TWO KINDS OF FLEXIBILITY IN THE ARMY RESERVE WE THINK YOU'LL LIKE.

One, time. We know how tough it is for a busy physician to make weekend time commitments. So we offer flexible training programs that allow a physician to share some time with his or her country. We arrange a schedule to suit your requirements.

Two, the opportunity to explore other phases of medicine, to add a different kind of knowledge—the challenge of military health care. It's a flexibility which could prove to be both stimulating and rewarding, with the opportunity to participate in a variety of programs that can put you in contact with medical leaders from all over the country.

See how flexible we can be, call our Army Medical Personnel Counselor.

**ARMY RESERVE.
BE ALL YOU CAN BE.**



HERE'S ONE DOCTOR WHO WON'T PAY HIS MALPRACTICE PREMIUMS THIS YEAR.

The Army covers his premiums. Since he's an Army Physician, there are a lot of worries associated with private practice that he won't have to contend with. Like excessive paperwork, and the overhead costs incurred in running a private practice.

What he will get is a highly challenging, highly rewarding experience. The Army offers varied assignments, chances to specialize, or further your education, and to work with a team of dedicated health care professionals. Plus a generous benefits package.

If you're interested in practicing high quality health care with a minimum of administrative burdens, examine Army medicine. Talk to your local Army Medical Department Counselor for more information.

**ARMY MEDICINE.
BE ALL YOU CAN BE.**

MAJOR OPPORTUNITIES FOR HEALTH PROFESSIONALS.

ARMY MEDICINE

144 Elk Place, Suite 1514
New Orleans, LA 70112-2640
(504) 522-1871 Collect

ARMY RESERVE MEDICINE

2100 6th Ave. South
Suite 303
Birmingham, AL 35205
(205) 930-9719 Collect



Medico-Legal Brief

Patient Sues Surgeon For Not Completing Work Forms

An employee's loss of his job was not a medical injury under the Health Claim Arbitration Act, a Maryland appellate court ruled.

Before entering a hospital for surgery, the employee informed his surgeon that an insurance form had to be completed and returned to his employer promptly. He intended the form to enable him to collect sick pay as well as to document a legitimate excuse for absence from work. His employer required a written explanation for absence from work, signed by a physician, which must be produced within 15 days of the last day worked.

On the day after the operation, the employee gave the form to the surgeon and insisted that he complete it immediately. The surgeon refused, but accepted it for completion by his secretary. The patient allegedly told the surgeon that the papers should go in within the next week or it could cost him his job. However, his employer did not receive the form until 18 days after he was admitted to the hospital, and the employee was discharged.

The employee filed suit against the surgeon, claiming that he was fired for an unexcused absence from work because the surgeon failed to send the form to his employer in a timely manner. The surgeon moved for dismissal, contenting that the patient's claims were not properly before the court but should have been filed with the Health Claims Arbitration Office. The trial court granted the surgeon's motion to dismiss, finding that the claim was essentially for malpractice. The court also granted his motion for summary judgment as to all counts except one for breach of contract.

On appeal, the court said that the employee's injury could not be characterized as having resulted from the rendering or failure to render health care. The employee said that he was entirely satisfied with the surgeon's performance in that regard. The complaint was for the surgeon's failure to perform a clerical task collateral to health care. Therefore, the court found that the case was properly before the trial court.

As to the breach of contract claim, the court said that the employee's claim that the services that the surgeon contracted to perform included the completion and submission of the forms in question, combined with an allegation of failure to complete and submit the forms, stated a plausible cause of action for breach of contract. The court said that summary judgment on this count was correctly denied.

The court said that the combination of either a contractual obligation or a gratuitous undertaking arising from the doctor-patient relationship, coupled with the employee's reliance, the risk of harm, and the surgeon's knowledge of these factors, gave rise to a duty to act reasonably in fulfilling the obligation. The court reversed the lower court's judgment and sent the case back for further proceedings. — *Chew v. Paul D. Meyer, M.D., P.A.*, 527 A2d 828 (Md. Ct. of Special App., July 10, 1987)

Does Your Office Use **ENVELOPES?**

5000 for \$99⁹⁵

(#10 Reg. Add 10%
for Window Envelopes)

Up to four lines printed in upper left corner.
Packed 500 per box. Price includes your imprint
in black or standard red, blue or green ink.

Mississippi Residents add 6% Sales Tax

All **Prepaid Orders** will be shipped on our
trucks or UPS at no additional charge

Mail or Phone Orders To:

Northtowne Printers

3909 Northview Dr.
Jackson, MS 39206

(601) 981-2675

— Next Month in *Journal MSMA* —

**"A Burning Issue: Attitudes Towards
Environment Tobacco Smoke"**

**"The Relationship of Fibrocystic Disease
to Breast Carcinoma"**

"Professionalism Under Siege"

Complete Program — 120th Annual Session

What Every Physician's Spouse Should Know

A series of booklets on topics of special interest to medical families published by the American Medical Association Auxiliary



Professional Liability

- Scope of problem ■ Legal process
- Coping

Impairment

- Causes ■ Impact on family
- Getting help

Survival Tips for Resident Physician/Medical Student Spouses

- Marriage in the training years
- Stress ■ Finances

Marriage

- Who players are ■ Special concerns
- Stages of medical career

Retirement and Estate Planning

- Making retirement years fulfilling
- Providing for the family's future

MAIL ORDER FORM TO:
American Medical Association Auxiliary, Inc.
535 N. Dearborn St., Chicago, IL 60610

Please send me the following publications in the series on *What Every Physician's Spouse Should Know*:

- # of copies
- Impairment
 - Professional Liability
 - Survival Tips for Resident Physician/Medical Student Spouses
 - Marriage
 - Retirement and Estate Planning
- (AVAILABLE FEB. 1, 1987)

Each booklet is \$3 per copy for AMA Auxiliary members and \$5 per copy for non-members

Enclosed is my check in the amount of \$_____ made payable to the AMA Auxiliary. Check must accompany order form

NAME _____

ADDRESS _____

CITY/STATE/ZIP _____

TELEPHONE () _____

PLACEMENT SERVICE

PHYSICIANS AVAILABLE

PHYSICIAN COMPLETING RESIDENCY in obstetrics and gynecology seeks practice opportunity in Mississippi. Available July 1989. Contact Greg Patton, M.D., 2325 Glenmary Avenue #2, Louisville, KY 40204.

EXPERIENCED PHYSICIAN, seeking licensure, wants position as assistant. Location flexible. P.O. Box 225, Bay Springs, MS 39422.

PHYSICIAN completing residency in general surgery, and spouse (board-eligible pediatrician) seek practice opportunities in Mississippi. Location flexible. Contact Dinesh Ranjan, M.D., 2118 Chantilla Rd., Catonsville, MD 21228.

A Commitment to Excellence in Health Care

Mississippi Emergency Association, P.A. (MEA) a physician-owned and managed group has created an environment for physicians that promotes the ideals of private practice while freeing doctors from the administrative and financial demands of the private practitioner.

Board certified or board eligible physicians in the area of Emergency Medicine, Internal Medicine, and Family Medicine are presented a variety of professional and personal rewards, including excellent salaries, benefits, and advancement opportunities.

MEA is a dynamic, growing corporation that delivers quality health care. If you would like to know what career opportunities we can offer you, send your curriculum vitae to Sheila M. Stringer or call (601) 366-6503.

**Mississippi Emergency
Association, P.A.
P.O. Box 12917
Jackson, MS 39236-2917**

PLACEMENT SERVICE/Continued

PHYSICIANS WANTED

EMERGENCY PHYSICIANS WANTED. Part-time and full-time positions in northeast Mississippi. Call (601) 328-8385.

MULTI-SPECIALTY CLINIC seeks BC/BE Hematologist/Oncologist. Modern, fully equipped 220 bed hospital. Contact John Wallace, Internal Medicine Clinic, 1203 Jefferson Street, Laurel, MS; (601) 649-6382 or MS WATS 1-800-654-7918.

IMMEDIATE OPPORTUNITY for medical director and part-time physicians. Family/General/Internal Medicine/ER. Highest pay in the industry. Why work for less when you can work for the best? Call (601) 328-9623.

PHYSICIANS NEEDED

Physicians (especially specialists such as ophthalmologists, pediatricians, orthopedists, neurologists, etc.) interested in performing consultative evaluations (according to Social Security guidelines) should contact the Medical Relations Office. WATS 1-800-962-2230; Jackson, 922-6811; extensions 2276, and 2190.



DISABILITY DETERMINATION SERVICES
1-800-962-2230

FULL-TIME EMERGENCY PHYSICIAN wanted. Call Jerry Lewis (817) 776-4121.

PRIMARY CARE PHYSICIANS needed immediately for single-specialty groups and multispecialty groups. For further information call collect. Jerry Lewis (817) 776-4121.

NEUROSURGEON needed immediately for 50-member multi-specialty group. Excellent opportunity. The Lewis Group, 1227 N. Valley Mills, Waco, TX 76710. Phone (817) 776-4121.

NEUROLOGIST needed immediately for 50-member multi-specialty group. Excellent opportunity. The Lewis Group, 1227 N. Valley Mills, Waco, TX 76710. Phone (817) 776-4121.

PEDIATRICIAN needed immediately for 50-member multi-specialty clinic. Excellent opportunity. The Lewis Group, 1227 N. Valley Mills, Waco, TX 76710. Phone (817) 776-4121.

EXCELLENT TEXAS OPPORTUNITIES in Cardiology, Cardiovascular Surgery, Dermatology, ENT, Family Practice, General Surgery, Internal Medicine, OB/GYN, Oncology, Orthopedic Surgery, Pediatrics, Pulmonology, Urology, Excellent quality of life, first year guarantee, etc. Other opportunities available also. Reply with C/V or call, Armando L. Frezza, Medical Support Services, 8806 Balcones Club Dr., Austin, TX 78750; 512-331-4164.

PULMONOLOGIST BE/BC to join internal medicine group or establish solo practice in southern univ. community of 100K; drawing area 300K. Associate w/200+ bed progressive hosp. Coverage available. Financial package includes: 1st yr. salary guarantee + benefit pkg. Excellent schools, housing, quality of life. 90 mins. from major cities & gulf coast. Contact Amy Evitts, TYLER & CO, 9040 Roswell Rd., Atlanta, GA 30350. Call 404-641-6411.

BOARD CERTIFIED or board eligible orthopedist wanted to join established clinic in metropolitan area of Mississippi. Three or four-man rotation. General orthopedics with interest in sports medicine desired. Box O, Miss. State Medical Association, P.O. Box 5229, Jackson, MS 39216.

For information about the *Journal's* classified section or placement service, please contact the Managing Editor, P.O. Box 5229, Jackson, MS 39216.

DIRECTOR STUDENT HEALTH CENTER MISSISSIPPI STATE UNIVERSITY

Mississippi State University is seeking applications and nominations for the position of Director of its Student Health Center. Mississippi State is a land-grant university with an enrollment of approximately 12,000 students located in Starkville. The Director reports to the Vice President for Student Affairs and is responsible for the delivery of all campus health care including sports medicine for intercollegiate athletics and the supervision of all medical, nursing, and support staff. The Director is also responsible for the facility and is the budget officer for that unit.

Requirements for candidacy include an earned medical degree and eligibility for Mississippi licensure. Specialty in family medicine or internal medicine and experience as a student health care administrator and/or student health care physician are preferred. A commitment to health education programming is necessary.

Nominations and applications should be sent to

Dr. Gene Tice, Chair
Search and Screening Committee for the
Director of the Student Health Center
Mississippi State University
P.O. Drawer DS
Mississippi State, MS 39762

Applications should include a letter indicating interest in the position, resume, and three letters of reference. Screening will begin June 1, 1988. Applications will be accepted until the position is filled. The position is available August 1, 1988.

Mississippi State University is an EO/AA employer.

CLASSIFIED

VISION BLOOD INSTRUMENT. Abbot Labs. Model 1537. \$15,000. Still in warranty. Call (601) 362-1577.

X-RAY MACHINE in excellent condition, medical supplies and equipment, waiting room furniture. Best offer. Call (601) 328-0830.



Index to Advertisers

Avanti 123

Disability Determination Service 130

Eli Lilly & Co. 10B

Harrell Chevrolet 119

Medical Assurance Co. of Miss. **second cover**
Millsaps Buie House 120
Miss. Emergency Association 129
Miss. State University 11
MSMA Benefit Plan and Trust 4

Northtowne Printers 128

Palisades Pharmaceuticals 108
Postgraduate Medicine 6
Premier Printing 125

Roche Laboratories **third, fourth covers**

Smith Kline and French 10A
St. Stanislaus 9

Trustmark 122

U. S. Army 127
U. S. Army Reserve 111

Jon Wimbish 124
Wyeth-Ayerst Laboratories 108A-D

Thomas Yates and Co. 12



**Recommended for
MSMA Members**

Disability Income Protection \$30,000*

Tax Free Each Year When You Are Disabled

- **Broad Disability Definitions.**
- **Residual Disability Benefits** paid when you continue to suffer income loss upon return to work.
- **Inflation Protection Rider** helps replace buying power of your benefit lost to inflation.
- **Choice of Benefit Period.**
- **Choice of Waiting Period.**
- **Underwritten by **INN****

...Founded in 1792, Insurance Company of North America is one of the oldest and strongest insurance companies in the United States.

* Based on \$2,500 Monthly Benefits

Insurance With Innovation

For Complete Information Contact:

Thomas Yates & Co.

GROUP INSURANCE ADMINISTRATORS

P.O. Box 5048 • Suite 365 Woodland Hills Building • 3000 Old Canton Road • Jackson, MS 39216
(601) 366-2406

The New Roche Product Books

- Offer a supplement to, not a substitute for, patient contact
- Support your specific instructions to the patient
- Provide a permanent general reinforcement of your oral counseling

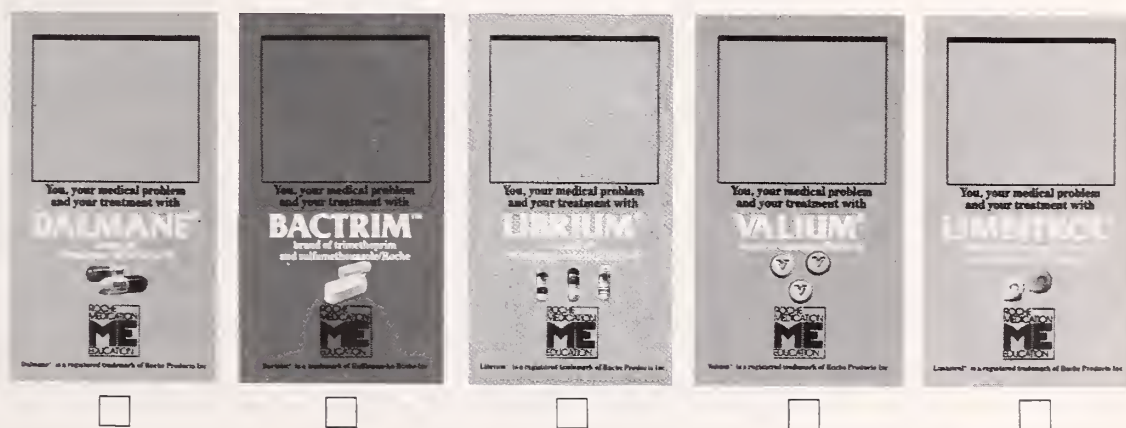
An ongoing Roche commitment to patient education

Roche has always believed that knowledge is each individual's key to good health and has long been committed to providing health care information to both professionals and the public. However, we have also always believed that the health care professional is and should be the prime source of medication information to patients. The Roche Medication Education (ME) program, begun in 1978, is one example of this commitment.

In the past seven years, over 50 million "WHAT IF" and "HOW TO" booklets have been provided by Roche for distribution to patients by physicians and other health care professionals.

Because you are the prime source of medication information for your patients, we invite you to look over the booklets listed below and request a complimentary supply of those applicable to your practice.

Complete the coupon and mail it to Professional Services Department, Roche Laboratories, Division of Hoffmann-La Roche Inc., Nutley, New Jersey 07110.



NAME _____

STREET ADDRESS _____

CITY _____

STATE _____

ZIP _____



Medicines that matter
from people who care

We Wrote the Books on Patient Medication Education...

You, your medical problem
and your treatment with

DALMANE®

brand of
flurazepam HCl/Roche



You, your medical problem
and your treatment with

LIBRIUM

brand of
chlordiazepoxide HCl



You, your medical problem
and your treatment with

BACTRIM™

brand of trimethoprim
and sulfamethoxazole/Roche



You, your medical problem
and your treatment with

VALIUM

brand of diazepam/Roche



You, your medical problem
and your treatment with

LIMBITROL®

brand of clonidine and
nortriptyline HCl/Schering



Copyright ©
1986 by Hoffmann-La Roche Inc.
and Roche Products Inc.
All rights reserved.

To order a complimentary supply of Roche Product Books, please see preceding page.

JOURNAL

OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION

MAY

1988

PRELIMINARY
PROGRAM
BILOXI, MS

120 th Session
June 15-19, 1988



Your confidence moves us. Again.

This year, more Mississippi doctors insured with us than with any other firm. Your confidence moves us . . . in more ways than one.

Growth through stability. Since we wrote our first policy in November of 1977, Medical Assurance Company has experienced steady growth and our membership is constantly increasing. The reason that more and more physicians are turning to us is simple: They know that they are receiving the most cost effective coverage backed by a financially sound company.

At Medical Assurance Company, savings and financial strength are provided by a program of sound investments and underwriting guidelines. Our staff is made up of experienced insurance professionals. And all claims are

reviewed by a panel of medical experts, so you can rest assured that your needs are understood.

A new location. To house a larger staff and to provide even better service, we have moved back to the State Medical Association Building, this time occupying an entire floor.

For answers to any questions you might have regarding medical professional liability insurance, visit us in our new offices on Riverside Drive, or call us anytime.



Medical Assurance Company of Mississippi

Street Address: Suite 301

735 Riverside Dr., Jackson, MS

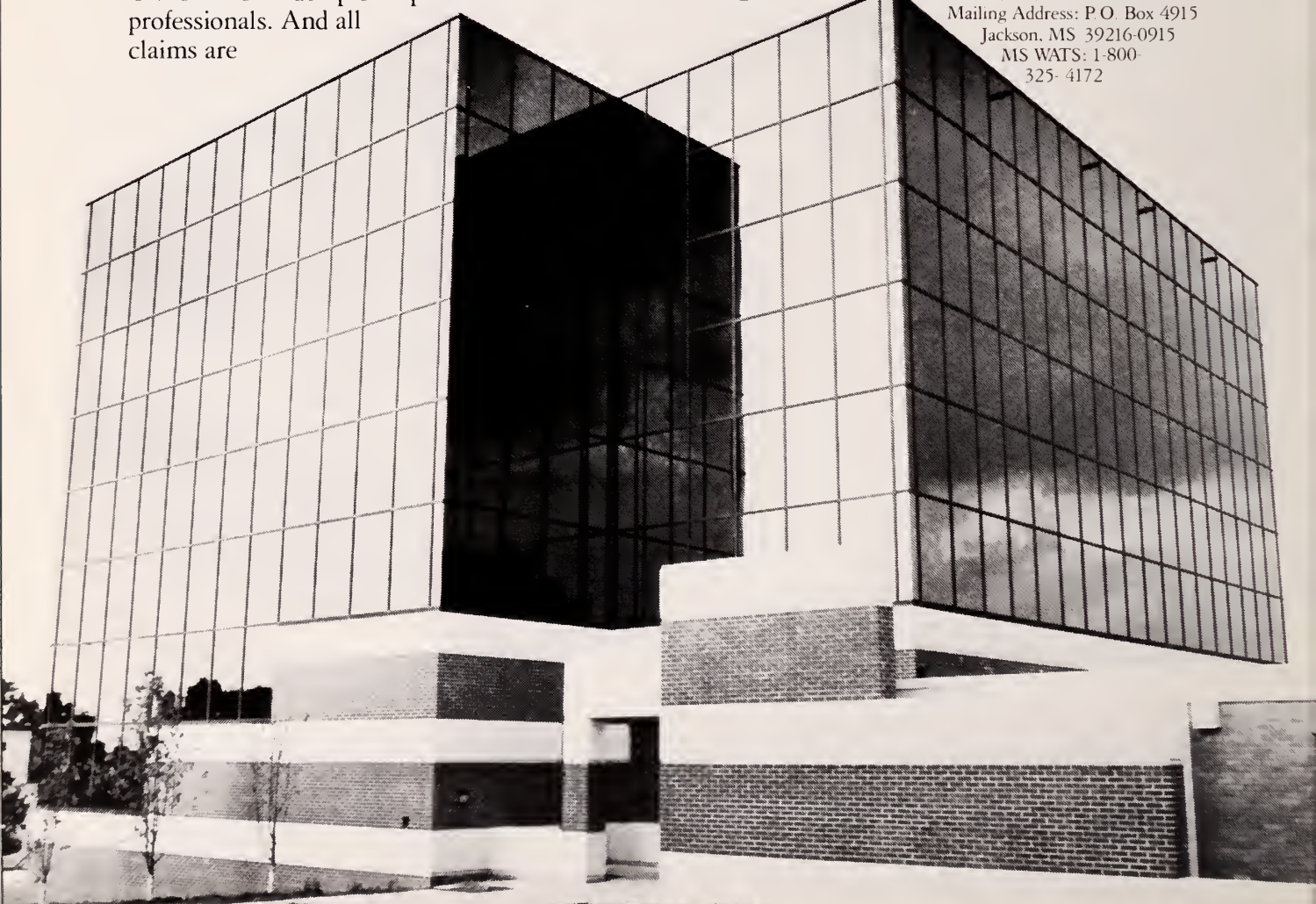
PHONE: (601) 353-2000

Mailing Address: P.O. Box 4915

Jackson, MS 39216-0915

MS WATS: 1-800-

325- 4172



JOURNAL

OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION

MAY 1988

VOLUME XXIX

NUMBER 5

SCIENTIFIC

A Burning Issue: Attitudes Towards Environmental Tobacco Smoke

*David R. Thomas, M.D., F. E. Thompson, Jr.,
M.D., M.P.H., Bruce T. Brackin, M.P.H., and
Ellen Shea Jones, M.S.*

131

The Relationship of Fibrocystic Disease to Breast Carcinoma

William J. Gibson, Jr., M.D.

137

SPECIAL ARTICLE

Professionalism Under Siege

W. Lamar Weems, M.D.

141

Preliminary Program, 120th Annual Session

151

EDITORIALS

EDITOR

Myron W. Lockey, M.D.

EDITOR EMERITUS

W. Moncure Dabney, M.D.

ASSOCIATE EDITORS

Arthur A. Derrick, Jr., M.D.

Joseph E. Johnston, M.D.

MANAGING EDITOR

Patsy Silver

PUBLICATIONS COMMITTEE

Richard C. Miller, M.D.,
Chairman

George H. Martin, M.D.

William J. Gibson, M.D.
and the editors

THE ASSOCIATION

W. Lamar Weems, M.D.
President

David R. Steckler, M.D.
President-Elect

Don Q. Mitchell, M.D.
Secretary-Treasurer

James C. Waites, M.D.
Speaker

H. Vann Craig, M.D.
Vice Speaker

Charles L. Mathews
Executive Director

In Conclusion

W. Lamar Weems, M.D.

148

Patients and Doctors, Commerce and Caring

A. A. Derrick, Jr., M.D.

147

DEPARTMENTS

Letters

149

Personals

157

New Members

158

Deaths

161

Medico-Legal Brief

163

Placement Service

165

Copyright© 1988, Mississippi State Medical Association. The views expressed in this publication reflect the opinions of the authors and do not necessarily state the opinions or policies of the Mississippi State Medical Association.

THE JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION (ISSN 0026-6393) is owned and published monthly by the Mississippi State Medical Association, founded 1856, at 735 Riverside Drive, Jackson, Mississippi 39202. Subscription rate, \$25.00 per annum; \$35.00 per annum for foreign subscriptions; \$2.25 per copy, as available. Advertising rates furnished on request. Printed by The Ovid Bell Press, Inc., Fulton, Missouri. Second-class postage paid at Jackson, Mississippi, and at additional mailing offices. POSTMASTER: Send address changes to Mississippi State Medical Association, P.O. Box 5229, Jackson, Mississippi 39216.



NEWSLETTER

May 1988

Dear Doctor:

The Health Care Financing Administration (HCFA), in a letter of response to MSMA, has indicated it will take the following actions regarding recent medical necessity regulations: HCFA will clarify the distinction between coverage and medical necessity requirements, and specifically indicate that the latter does not apply to non-covered services; HCFA will improve the tone and clarity of letters to physicians and beneficiaries, and will identify a carrier point of contact; the Medicare carrier is instructed to request additional documentation prior to issuing a medical necessity denial; HCFA will launch an educational campaign to give physicians better information on what Medicare covers.

MSMA and the federation of American medicine will continue to seek Congressional repeal of the medical necessity law.

A decision is expected soon in the lawsuit filed against the Mississippi Ethics Commission by the MSMA, the Mississippi Hospital Association, and Kate Aseme, M.D. A Hinds County chancery judge heard oral arguments last month and gave the parties ten days to file briefs. The suit seeks to overturn a Commission ruling that prohibits physicians from serving on the governing boards of public hospitals where they hold staff privileges.

The Mississippi Legislature, which for years has been moving toward the statutory abolition of sovereign immunity and the creation of a state-run liability pool, has apparently had a change of sentiment. Both chambers passed H.B. 937, which extends the doctrine of sovereign immunity for another year, and the bill has gone to the governor for his signature. A state Supreme Court ruling abolished the judicially created doctrine of sovereign immunity and gave the legislature time to address the issue.

This issue of your journal includes more details about next month's 120th Annual Session in Biloxi. There's a full schedule of business, scientific and social events. Plan now to attend.

Sincerely,



Patsy Silver
Managing Editor

Counsel to Authors

THE JOURNAL welcomes manuscripts which should be submitted to the Editors at 735 Riverside Drive, Jackson, MS 39216, in original and at least one duplicate copy. They must be typewritten double spaced on 8½ by 11-inch white paper. **Brief manuscripts (about 2,500 words or 8 pages) will be given preference over longer articles.**

The author is responsible for all statements made in his work, including changes made by the manuscript editor. Manuscripts are received with the understanding that they are not under simultaneous consideration by any other publication and have not been previously published. All manuscripts will be acknowledged, and while those rejected are generally returned to the author, the JOURNAL is not responsible in event of loss. Manuscripts accepted for publication become the property of the JOURNAL and are copyrighted by the association when published. They may not be published elsewhere without written release and permission from both the JOURNAL and the author.

All copy must be double spaced, including legends, footnotes, and references. Generous margins at the top, bottom, and on both sides of the page should be allowed. Each page after the title page should be consecutively numbered and carry a running head identifying the paper and author.

Titles should be short, specific, and clear. Ordinarily, a title should not exceed 80 characters, including punctuation.

References should be limited to a maximum of 10. If there are more than 10, the references will be omitted and a notation made to write the author for a complete list. Textbooks, personal communications, and unpublished data may not be cited as references. References must include names of authors, complete title cited, name of journal or book spelled out or abbreviated according to the *Index Medicus*, volume number, first and last page numbers, month, date (if published more frequently than monthly), and year. References should be arranged according to order listed in the text and must be numbered consecutively.

Manuscripts accepted for publication are subject to copy editing. Authors will receive galley proof prior to publication. Galley proof is only for correction of errors, and text changes

may not be made. The galley proof should be returned by the author within 48 hours from receipt, and no further changes may be made.

Illustrations consist of all material which cannot be set into type such as photographs, line drawings, graphs, charts, and tracings. Illustrations should be submitted separately from text copy. Figures and drawings should be professionally prepared with black ink on white paper. Photographs should be of high resolution, unmounted, untrimmed, glossy prints. Each must be clearly identified. No charges are made to authors for up to four illustration engravings. More are not permitted unless voted on by two editors and extra costs must be absorbed by the author.

Illustrations must be numbered and cited in the text. Legends, not exceeding 40 words and preferably shorter, must accompany each illustration, typed double spaced on separate sheets. The following information should appear on a gummed label affixed to the back of each illustration: Figure number, manuscript title, author's name, and arrow indicating top of the illustration.

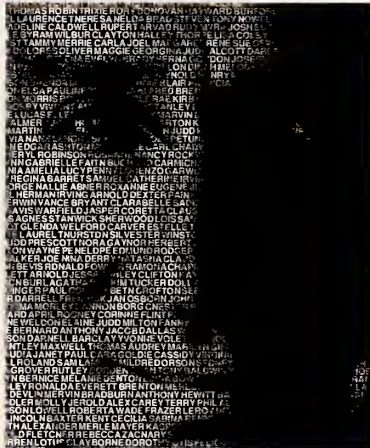
In photographs in which there is any possibility of personal identification, an acceptable legal release must accompany the material.

A thesis summary of 75 to 100 words must accompany each manuscript.

Reprints may be obtained at cost plus shipping charges from the association and **should be ordered prior to publication.** The JOURNAL reserves the right to decline any manuscript. Authors should avoid placing subheads in the text, and the Editors reserve the prerogative of writing and inserting subheads according to JOURNAL style. — *The Editors.*

In addition, in view of *The Copyright Revision Act of 1976*, effective Jan. 1, 1978, transmittal letters to the editor should contain the following language: "In consideration of the Mississippi State Medical Association's taking action in reviewing and editing my submission, the author(s) undersigned hereby transfers, assigns, or otherwise conveys all copyright ownership to the MSMA in the event that such work is published by the MSMA." We regret that transmittal letters not containing the foregoing language signed by *all* authors of the submission will necessitate delay in review of the manuscript. — *The Editors.*

(PROPRANOLOL HCl)
LONG ACTING CAPSULES 60, 80, 120, 160 mg



JOHN NIGEL ARNOLD
ARCY GRIFFITH AL
AISY TRINA NADIA
NGELA WILSON HIL
ILLIE ORLANDO BAL
ENE SUE OSWALD C
ELENA EVELYN BRA
ERRY TURNER PAGE
FFREY BREWSTER
OBLE RAE KIRBY IRE
ROOKE LUCAS ELLER
ECIL SUZANNA THOM
AMERON HASKEL DON
ANCY ROCKWELL FREL
ANIA AMELIA LUCY PEN
PENCER BURGESS NATH
ARAH LIONEL TYSON SEL
ARFIELD JASPER CORET
AUL ROBERT ED CHARLIE
IL VESTER WINSTON BUCK
RISTEN BURTON WAYNE PE
ARY VOLANDA HARDEN MUI
AY GERALD WHITNEY REDFO
INGER PAUL CONROY BETH C
RADWELL GENE HOBART CH
IRGIL SELMA MASON ROSAM
NTHONY TOM JACOB DALLAS
ARWING GWENDOLEN BERKE
EROME HUBERT MABEL MILES
GAN TONY BALDWIN VYVETTER
ESLEY RONALDA EVERETT BR
EATH NOLAN ARVIN CHARLOTT
HASE STUART DEWEY DREW CA
ERLE MAYER KASPER COLETT
OYD AMY DARREN LOTUS CLAY
OLLY JOHN MARC RYLAN COLL
ERA FREIDA LUISTOM DAVIS KARENA
ARISSA LEAH MURIEL LOGAN TYRONE
EIGH NED TOM AMANDA THOM
BBOOT WENDY ELVIS HAGEN PE
ENJAMIN KLAUS FAYE JODY VAL
ALCOLM ANDREW NYDIA RAY NATA
ARVEY ROBERT KRISTEN JIM JOHN
ASEY ORLANDO PIA WARREN E
HERESA JOE ANTHONY WEBB
ERLIN GARNER ALLAN ALICE JANE
AYNOR TRINA LLOYD ARNOLD RONALD
AYWARD WARD REED JASON MATT
ISA HILL EL ATWOOD JOY BURT
ICTORIA JOHN TONIA FIONA RH
ADFORD DORA BROOKE PAYNE SYLVIA
ORRIS ELVIRA EL ROY WARTON N
ALKER BRAD MERVIN SYDNEY L
OYLE CHERIE SUE JOEL TILLIER
ARGARET MAGGIE MARVINGER
HRISTOPHER BRENDA WALTER C
ERNICE CURTIS VERONICA BILL M
AY OLIVER BLANCHE DARCIE LESL
AULINE MILLARD RODNEY GRACE
OBERT KRISTEN BURTON CAMPBELL
REND CARLOS MARIANNE SANDER
ATHANIA JUDD GARFIELD HENRY
RYAN RANDOLPH VIVIAN LEWIS
LINT BOWIE ALEXANDRA CURT HASKEL
OSEMARY ROLAND AUBIN MARGA
RADSHAW RILEY JOE BERNIE PHIL
UNTLEY DAVID ALISON THELMA
NNETTE PRESCOTT LENORE JACK
LEXIS LINDA ORSON THADDEUS
UIS CARY FRED LEE LAUREL GWENDOLEN
INSTON JOLIE SIGMUND WILTON
ACHEL JEROLD JUDITH HOGAN
TEWART MERLE BARLOW LAWSON
YRONE CLIFTON NORMAN BURN
IM KIM NINA BENNETT SEBASTIAN
ULLIVAN BUCKLEY BRANDON MAR
ONI ARTHUR LINCOLN MASON AL
ICK ALEXANDER GANNON DREW
OLDIE SHARON MILTON MARC BORG
AUL GUNTHER FELIX RALPH NATHANIEL
OLLY LAVERNE LEIGH SAL DOMINIC
UTLEY GARLAND VAL DIANE BRUCE
YNNIE ELVIS JUDD FLETCHER FELICIA
AYE LEIGH ELMO LOGAN BEAMAN

JOHN NIGEL ARNOLD
ARCY GRIFFITH AL
AISY TRINA NADIA
NGELA WILSON HIL
ILLIE ORLANDO BAL
ENE SUE OSWALD C
ELENA EVELYN BRA
ERRY TURNER PAGE
FFREY BREWSTER
OBLE RAE KIRBY IRE
ROOKE LUCAS ELLER
ECIL SUZANNA THOM
AMERON HASKEL DON
ANCY ROCKWELL FREL
ANIA AMELIA LUCY PEN
PENCER BURGESS NATH
ARAH LIONEL TYSON SEL
ARFIELD JASPER CORET
AUL ROBERT ED CHARLIE
IL VESTER WINSTON BUCK
RISTEN BURTON WAYNE PE
ARY VOLANDA HARDEN MUI
AY GERALD WHITNEY REDFO
INGER PAUL CONROY BETH C
RADWELL GENE HOBART CH
IRGIL SELMA MASON ROSAM
NTHONY TOM JACOB DALLAS
ARWING GWENDOLEN BERKE
EROME HUBERT MABEL MILES
GAN TONY BALDWIN VYVETTER
ESLEY RONALDA EVERETT BR
EATH NOLAN ARVIN CHARLOTT
HASE STUART DEWEY DREW CA
ERLE MAYER KASPER COLETT
OYD AMY DARREN LOTUS CLAY
OLLY JOHN MARC RYLAN COLL
ERA FREIDA LUISTOM DAVIS KARENA
ARISSA LEAH MURIEL LOGAN TYRONE
EIGH NED TOM AMANDA THOM
BBOOT WENDY ELVIS HAGEN PE
ENJAMIN KLAUS FAYE JODY VAL
ALCOLM ANDREW NYDIA RAY NATA
ARVEY ROBERT KRISTEN JIM JOHN
ASEY ORLANDO PIA WARREN E
HERESA JOE ANTHONY WEBB
ERLIN GARNER ALLAN ALICE JANE
AYNOR TRINA LLOYD ARNOLD RONALD
AYWARD WARD REED JASON MATT
ISA HILL EL ATWOOD JOY BURT
ICTORIA JOHN TONIA FIONA RH
ADFORD DORA BROOKE PAYNE SYLVIA
ORRIS ELVIRA EL ROY WARTON N
ALKER BRAD MERVIN SYDNEY L
OYLE CHERIE SUE JOEL TILLIER
ARGARET MAGGIE MARVINGER
HRISTOPHER BRENDA WALTER C
ERNICE CURTIS VERONICA BILL M
AY OLIVER BLANCHE DARCIE LESL
AULINE MILLARD RODNEY GRACE
OBERT KRISTEN BURTON CAMPBELL
REND CARLOS MARIANNE SANDER
ATHANIA JUDD GARFIELD HENRY
RYAN RANDOLPH VIVIAN LEWIS
LINT BOWIE ALEXANDRA CURT HASKEL
OSEMARY ROLAND AUBIN MARGA
RADSHAW RILEY JOE BERNIE PHIL
UNTLEY DAVID ALISON THELMA
NNETTE PRESCOTT LENORE JACK
LEXIS LINDA ORSON THADDEUS
UIS CARY FRED LEE LAUREL GWENDOLEN
INSTON JOLIE SIGMUND WILTON
ACHEL JEROLD JUDITH HOGAN
TEWART MERLE BARLOW LAWSON
YRONE CLIFTON NORMAN BURN
IM KIM NINA BENNETT SEBASTIAN
ULLIVAN BUCKLEY BRANDON MAR
ONI ARTHUR LINCOLN MASON AL
ICK ALEXANDER GANNON DREW
OLDIE SHARON MILTON MARC BORG
AUL GUNTHER FELIX RALPH NATHANIEL
OLLY LAVERNE LEIGH SAL DOMINIC
UTLEY GARLAND VAL DIANE BRUCE
YNNIE ELVIS JUDD FLETCHER FELICIA
AYE LEIGH ELMO LOGAN BEAMAN

JOHN NIGEL ARNOLD
ARCY GRIFFITH AL
AISY TRINA NADIA
NGELA WILSON HIL
ILLIE ORLANDO BAL
ENE SUE OSWALD C
ELENA EVELYN BRA
ERRY TURNER PAGE
FFREY BREWSTER
OBLE RAE KIRBY IRE
ROOKE LUCAS ELLER
ECIL SUZANNA THOM
AMERON HASKEL DON
ANCY ROCKWELL FREL
ANIA AMELIA LUCY PEN
PENCER BURGESS NATH
ARAH LIONEL TYSON SEL
ARFIELD JASPER CORET
AUL ROBERT ED CHARLIE
IL VESTER WINSTON BUCK
RISTEN BURTON WAYNE PE
ARY VOLANDA HARDEN MUI
AY GERALD WHITNEY REDFO
INGER PAUL CONROY BETH C
RADWELL GENE HOBART CH
IRGIL SELMA MASON ROSAM
NTHONY TOM JACOB DALLAS
ARWING GWENDOLEN BERKE
EROME HUBERT MABEL MILES
GAN TONY BALDWIN VYVETTER
ESLEY RONALDA EVERETT BR
EATH NOLAN ARVIN CHARLOTT
HASE STUART DEWEY DREW CA
ERLE MAYER KASPER COLETT
OYD AMY DARREN LOTUS CLAY
OLLY JOHN MARC RYLAN COLL
ERA FREIDA LUISTOM DAVIS KARENA
ARISSA LEAH MURIEL LOGAN TYRONE
EIGH NED TOM AMANDA THOM
BBOOT WENDY ELVIS HAGEN PE
ENJAMIN KLAUS FAYE JODY VAL
ALCOLM ANDREW NYDIA RAY NATA
ARVEY ROBERT KRISTEN JIM JOHN
ASEY ORLANDO PIA WARREN E
HERESA JOE ANTHONY WEBB
ERLIN GARNER ALLAN ALICE JANE
AYNOR TRINA LLOYD ARNOLD RONALD
AYWARD WARD REED JASON MATT
ISA HILL EL ATWOOD JOY BURT
ICTORIA JOHN TONIA FIONA RH
ADFORD DORA BROOKE PAYNE SYLVIA
ORRIS ELVIRA EL ROY WARTON N
ALKER BRAD MERVIN SYDNEY L
OYLE CHERIE SUE JOEL TILLIER
ARGARET MAGGIE MARVINGER
HRISTOPHER BRENDA WALTER C
ERNICE CURTIS VERONICA BILL M
AY OLIVER BLANCHE DARCIE LESL
AULINE MILLARD RODNEY GRACE
OBERT KRISTEN BURTON CAMPBELL
REND CARLOS MARIANNE SANDER
ATHANIA JUDD GARFIELD HENRY
RYAN RANDOLPH VIVIAN LEWIS
LINT BOWIE ALEXANDRA CURT HASKEL
OSEMARY ROLAND AUBIN MARGA
RADSHAW RILEY JOE BERNIE PHIL
UNTLEY DAVID ALISON THELMA
NNETTE PRESCOTT LENORE JACK
LEXIS LINDA ORSON THADDEUS
UIS CARY FRED LEE LAUREL GWENDOLEN
INSTON JOLIE SIGMUND WILTON
ACHEL JEROLD JUDITH HOGAN
TEWART MERLE BARLOW LAWSON
YRONE CLIFTON NORMAN BURN
IM KIM NINA BENNETT SEBASTIAN
ULLIVAN BUCKLEY BRANDON MAR
ONI ARTHUR LINCOLN MASON AL
ICK ALEXANDER GANNON DREW
OLDIE SHARON MILTON MARC BORG
AUL GUNTHER FELIX RALPH NATHANIEL
OLLY LAVERNE LEIGH SAL DOMINIC
UTLEY GARLAND VAL DIANE BRUCE
YNNIE ELVIS JUDD FLETCHER FELICIA
AYE LEIGH ELMO LOGAN BEAMAN

JOHN NIGEL ARNOLD
ARCY GRIFFITH AL
AISY TRINA NADIA
NGELA WILSON HIL
ILLIE ORLANDO BAL
ENE SUE OSWALD C
ELENA EVELYN BRA
ERRY TURNER PAGE
FFREY BREWSTER
OBLE RAE KIRBY IRE
ROOKE LUCAS ELLER
ECIL SUZANNA THOM
AMERON HASKEL DON
ANCY ROCKWELL FREL
ANIA AMELIA LUCY PEN
PENCER BURGESS NATH
ARAH LIONEL TYSON SEL
ARFIELD JASPER CORET
AUL ROBERT ED CHARLIE
IL VESTER WINSTON BUCK
RISTEN BURTON WAYNE PE
ARY VOLANDA HARDEN MUI
AY GERALD WHITNEY REDFO
INGER PAUL CONROY BETH C
RADWELL GENE HOBART CH
IRGIL SELMA MASON ROSAM
NTHONY TOM JACOB DALLAS
ARWING GWENDOLEN BERKE
EROME HUBERT MABEL MILES
GAN TONY BALDWIN VYVETTER
ESLEY RONALDA EVERETT BR
EATH NOLAN ARVIN CHARLOTT
HASE STUART DEWEY DREW CA
ERLE MAYER KASPER COLETT
OYD AMY DARREN LOTUS CLAY
OLLY JOHN MARC RYLAN COLL
ERA FREIDA LUISTOM DAVIS KARENA
ARISSA LEAH MURIEL LOGAN TYRONE
EIGH NED TOM AMANDA THOM
BBOOT WENDY ELVIS HAGEN PE
ENJAMIN KLAUS FAYE JODY VAL
ALCOLM ANDREW NYDIA RAY NATA
ARVEY ROBERT KRISTEN JIM JOHN
ASEY ORLANDO PIA WARREN E
HERESA JOE ANTHONY WEBB
ERLIN GARNER ALLAN ALICE JANE
AYNOR TRINA LLOYD ARNOLD RONALD
AYWARD WARD REED JASON MATT
ISA HILL EL ATWOOD JOY BURT
ICTORIA JOHN TONIA FIONA RH
ADFORD DORA BROOKE PAYNE SYLVIA
ORRIS ELVIRA EL ROY WARTON N
ALKER BRAD MERVIN SYDNEY L
OYLE CHERIE SUE JOEL TILLIER
ARGARET MAGGIE MARVINGER
HRISTOPHER BRENDA WALTER C
ERNICE CURTIS VERONICA BILL M
AY OLIVER BLANCHE DARCIE LESL
AULINE MILLARD RODNEY GRACE
OBERT KRISTEN BURTON CAMPBELL
REND CARLOS MARIANNE SANDER
ATHANIA JUDD GARFIELD HENRY
RYAN RANDOLPH VIVIAN LEWIS
LINT BOWIE ALEXANDRA CURT HASKEL
OSEMARY ROLAND AUBIN MARGA
RADSHAW RILEY JOE BERNIE PHIL
UNTLEY DAVID ALISON THELMA
NNETTE PRESCOTT LENORE JACK
LEXIS LINDA ORSON THADDEUS
UIS CARY FRED LEE LAUREL GWENDOLEN
INSTON JOLIE SIGMUND WILTON
ACHEL JEROLD JUDITH HOGAN
TEWART MERLE BARLOW LAWSON
YRONE CLIFTON NORMAN BURN
IM KIM NINA BENNETT SEBASTIAN
ULLIVAN BUCKLEY BRANDON MAR
ONI ARTHUR LINCOLN MASON AL
ICK ALEXANDER GANNON DREW
OLDIE SHARON MILTON MARC BORG
AUL GUNTHER FELIX RALPH NATHANIEL
OLLY LAVERNE LEIGH SAL DOMINIC
UTLEY GARLAND VAL DIANE BRUCE
YNNIE ELVIS JUDD FLETCHER FELICIA
AYE LEIGH ELMO LOGAN BEAMAN

JOHN NIGEL ARNOLD
ARCY GRIFFITH AL
AISY TRINA NADIA
NGELA WILSON HIL
ILLIE ORLANDO BAL
ENE SUE OSWALD C
ELENA EVELYN BRA
ERRY TURNER PAGE
FFREY BREWSTER
OBLE RAE KIRBY IRE
ROOKE LUCAS ELLER
ECIL SUZANNA THOM
AMERON HASKEL DON
ANCY ROCKWELL FREL
ANIA AMELIA LUCY PEN
PENCER BURG

ON

...like the more than one million patients who have received **INDERAL® LA**.

In a recent survey, 4,120 participating physicians gave us their views¹ on **INDERAL LA** in the treatment of hypertension, angina and migraine.

INDERAL LA is their preferred beta blocker

...of the nearly three out of four physicians responding to the questionnaire, an impressive 97% rated **INDERAL LA** good to excellent for overall performance. Virtually all cited efficacy, tolerability, long-term cardiovascular protection and once-daily convenience as important factors in their choosing to prescribe **INDERAL LA**.

INDERAL LA promotes patient compliance

...Virtually every responding physician rated patient satisfaction with **INDERAL LA** to be as good as, or better than, other beta blockers.

Like conventional **INDERAL** Tablets, **INDERAL LA** should not be used in the presence of congestive heart failure, sinus bradycardia, cardiogenic shock, heart block greater than first degree and bronchial asthma.

ONCE-DAILY
INDERAL® LA
(PROPRANOLOL HCl) LONG ACTING CAPSULES
60, 80, 120, 160 mg

The one you know best keeps looking better

Please see next page for brief summary of prescribing information.

ROBERT KRISTEN ARNOLD
MARCUS RHODA JEREMY
LIAN FLOYD ELLIOTT HAR
MYRA JOSH EDWARD A
AMMY MERRIE CARLA JO
LEY IRIS STEPHANIE CHA
JESSICA BERNARD MA
BLAIR PATRICIA MIL
ANNON MORRIS BOND H
AHAM ELEANORE GIN
MORE CLAY PEARCE G
NICOLE PET UNIA HA
LEE CHERYL ROBINS
VIN HUNTER NEVIN
ATLAND COLEMAN
ER PAINE JANE SH
AWLEY KATHERINE
E IRMA MYLES JULIE
INETTE LAUREL TH
RANDALL PHYLLIS
RION JULIUS GLEN N
JESSE ASHLEY CLIF
ANCHE ROBIN JACO
RK NOAH STEWART
ORINNE FLINT PRESL
RON NORTON JULIE
SHIRLEY HARPER PE
OLDIE CASSIDY VIRGI
LYDIA GROVER RUTL
SIBYL NOEL HUMPHR
L BILL LILLIAN MARLE
ADE FRAZER LEROY DO
SMEREDITH ALEXAND
ESMOND TONY HILARY
ERTA LEONORA BART
ENNIS CULLEN TABIT
RENDAN GUNTHER E
MARIO JAYNE MELIS
SPER VITO NICHOLA
Y JONATHAN SALLY
ON SEAN WALDEN RO
RT DIANE JENNIFER LE
LLEEN DWIGHT MITCH
INGRID CHANNING LIN
ANSON ANDREW GALL
ER ROXANNE ASHBY HAR
A TRIXIE RORY BAYARD CH
JOSEPH PAGE JULIE REX REY
LEONA RUDY MARCUS SLOANE
RA DONNA CRAIG ANNE ELMER F
HAM ADELINE HALLEY MIL FORD DE
ON PRISCILLA WILSON RUPERT HARR
ATH STEVEN BRONSON JEAN PETER DIA
NE LORNA ROBERTA NOBLE TOM SABINA
T MIA BARTLETT BEAU DINAH JIM FRITZ D
INE CECILIA TAMARA BEN ROSABELLE JU
LE SIMPSON BERNARD ERROL CORETTA
VERETT MARGO LENA LORENZO CLIFF RI
NMARTIN THOMAS TONY COLEMAN LUCI
DEN REBECCA COURTNEY NICOLE BREWS
ER RHONDA TURNER MADELINE ELL EN MC
DWLER JANET TONY THOMAS ROBERT SO
T ROBIN HARDEN BRETT NEIL BORDEN OT
WATSON GEORGIA BARCLAY ODESSA
ADWICK APRIL TODD ARDEN LAUR
A MABEL SHERWIN PATIDA GINA
ARD ARNOLD HILLIARD SILVES
ORA DONAHUE EEGAN MURRA
AMDEN EDNA MILES ALBER
RUSSEL AUDREY ELI DEWE
NOLD TONY WILFRED CL
DAM TYSON LARISSA A
ON LIBBY OSCAR PHY
OYD PHOEBE ARCH
S FRANKLIN LOT
M RENEE CHA
AN ZELDA
AS MEGA
Y CRY
SHEE



BRIEF SUMMARY (FOR FULL PRESCRIBING INFORMATION, SEE PACKAGE CIRCULAR.)

INDERAL® LA brand of propranolol hydrochloride (Long Acting Capsules)

DESCRIPTION. Inderal LA is formulated to provide a sustained release of propranolol hydrochloride. Inderal LA is available as 60 mg, 80 mg, 120 mg, and 160 mg capsules.

CLINICAL PHARMACOLOGY. Inderal is a nonselective, beta-adrenergic receptor-blocking agent possessing no other autonomic nervous system activity. It specifically competes with beta-adrenergic receptor-stimulating agents for available receptor sites. When access to beta-receptor sites is blocked by Inderal, the chronotropic, inotropic, and vasodilator responses to beta-adrenergic stimulation are decreased proportionately.

Inderal LA Capsules (60, 80, 120, and 160 mg) release propranolol HCl at a controlled and predictable rate. Peak blood levels following dosing with Inderal LA occur at about 6 hours and the apparent plasma half-life is about 10 hours. When measured at steady state over a 24-hour period the areas under the propranolol plasma concentration-time curve (AUCs) for the capsules are approximately 60% to 65% of the AUCs for a comparable divided daily dose of Inderal Tablets. The lower AUCs for the capsules are due to greater hepatic metabolism of propranolol, resulting from the slower rate of absorption of propranolol. Over a twenty-four (24) hour period, blood levels are fairly constant for about twelve (12) hours then decline exponentially.

Inderal LA should not be considered a simple mg-for-mg substitute for conventional propranolol and the blood levels achieved do not match (are lower than) those of two to four times daily dosing with the same dose. When changing to Inderal LA from conventional propranolol, a possible need for retitration upwards should be considered especially to maintain effectiveness at the end of the dosing interval. In most clinical settings, however, such as hypertension or angina where there is little correlation between plasma levels and clinical effect, Inderal LA has been therapeutically equivalent to the same mg dose of conventional Inderal as assessed by 24-hour effects on blood pressure and on 24-hour exercise responses of heart rate, systolic pressure, and rate pressure product. Inderal LA can provide effective beta blockade for a 24-hour period.

INDICATIONS AND USAGE. **Hypertension:** Inderal LA is indicated in the management of hypertension; it may be used alone or used in combination with other antihypertensive agents, particularly a thiazide diuretic. Inderal LA is not indicated in the management of hypertensive emergencies.

Angina Pectoris Due to Coronary Atherosclerosis: Inderal LA is indicated for the long-term management of patients with angina pectoris.

Migraine: Inderal LA is indicated for the prophylaxis of common migraine headache. The efficacy of propranolol in the treatment of a migraine attack that has started has not been established and propranolol is not indicated for such use.

Hypertrophic Subaortic Stenosis: Inderal LA is useful in the management of hypertrophic subaortic stenosis, especially for treatment of exertional or other stress-induced angina, palpitations, and syncope. Inderal LA also improves exercise performance. The effectiveness of propranolol hydrochloride in this disease appears to be due to a reduction of the elevated outflow pressure gradient which is exacerbated by beta-receptor stimulation. Clinical improvement may be temporary.

CONTRAINDICATIONS. Inderal is contraindicated in 1) cardiogenic shock; 2) sinus bradycardia and greater than first-degree block; 3) bronchial asthma; 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with Inderal.

WARNINGS. **CARDIAC FAILURE:** Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or Inderal should be discontinued (gradually, if possible).

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following abrupt discontinuance of Inderal therapy. Therefore, when discontinuance of Inderal is planned, the dosage should be gradually reduced over at least a few weeks, and the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If Inderal therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute Inderal therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

Nonallergic Bronchospasm (eg, chronic bronchitis, emphysema)—PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD IN GENERAL NOT RECEIVE BETA BLOCKERS. Inderal should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

MAJOR SURGERY: The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

INDERAL (propranolol HCl), like other beta blockers, is a competitive inhibitor of beta-receptor agonists and its effects can be reversed by administration of such agents, eg, dobutamine or isoproterenol. However, such patients may be subject to protracted severe hypotension. Difficulty in starting and maintaining the heartbeat has also been reported with beta blockers.

DIABETES AND HYPOGLYCEMIA: Beta blockers should be used with caution in diabetic patients if a beta-blocking agent is required. Beta blockers may mask tachycardia occurring with hypoglycemia, but other manifestations such as dizziness and sweating may not be significantly affected. Following insulin-induced hypoglycemia, propranolol may cause a delay in the recovery of blood glucose to normal levels.

THYROTOXICOSIS: Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol may change thyroid function tests, increasing T_4 and reverse T_3 , and decreasing T_3 .

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

PRECAUTIONS. **GENERAL:** Propranolol should be used with caution in patients with impaired hepatic or renal function. Inderal (propranolol HCl) is not indicated for the treatment of hypertensive emergencies.

Beta-adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be told that Inderal may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

CLINICAL LABORATORY TESTS: Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

DRUG INTERACTIONS: Patients receiving catecholamine-depleting drugs such as reserpine should be closely observed if Inderal (propranolol HCl) is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension.

Caution should be exercised when patients receiving a beta blocker are administered a calcium-channel-blocking drug, especially intravenous verapamil, for both agents may depress myocardial contractility or atrioventricular conduction. On rare occasions, the concomitant intravenous use of a beta blocker and verapamil has resulted in serious adverse reactions, especially in patients with severe cardiomyopathy, congestive heart failure, or recent myocardial infarction.

Aluminum hydroxide gel greatly reduces intestinal absorption of propranolol.

Ethanol slows the rate of absorption of propranolol.

Phenytoin, phenobarbital, and rifampin accelerate propranolol clearance.

Chlorpromazine, when used concomitantly with propranolol, results in increased plasma levels of both drugs.

Antipyrine and lidocaine have reduced clearance when used concomitantly with propranolol.

Thyroxine may result in a lower than expected T_3 concentration when used concomitantly with propranolol.

Cimetidine decreases the hepatic metabolism of propranolol, delaying elimination and increasing blood levels.

Theophylline clearance is reduced when used concomitantly with propranolol.

CARCINOGENESIS, MUTAGENESIS, IMPAIRMENT OF FERTILITY: Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies in both rats and mice, employing doses up to 150 mg/kg day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

PREGNANCY: Pregnancy Category C. Inderal has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximum recommended human dose.

There are no adequate and well-controlled studies in pregnant women. Inderal should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

NURSING MOTHERS: Inderal is excreted in human milk. Caution should be exercised when Inderal is administered to a nursing woman.

PEDIATRIC USE: Safety and effectiveness in children have not been established.

ADVERSE REACTIONS. Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

Cardiovascular: Bradycardia; congestive heart failure; intensification of AV block; hypotension; paresthesia of hands; thrombocytopenic purpura; arterial insufficiency, usually of the Raynaud type.

Central Nervous System: Light-headedness; mental depression manifested by insomnia, lassitude, weakness, fatigue; reversible mental depression progressing to cataplexy; visual disturbances; hallucinations; vivid dreams; an acute reversible syndrome characterized by disorientation for time and place, short-term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics. For immediate formulations, fatigue, lethargy, and vivid dreams appear dose related.

Gastrointestinal: Nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis.

Allergic: Pharyngitis and agranulocytosis, erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress.

Respiratory: Bronchospasm.

Hematologic: Agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura.

Auto-immune: In extremely rare instances, systemic lupus erythematosus has been reported.

Miscellaneous: Alopecia, LE-like reactions, psoriasisiform rashes, dry eyes, male impotence, and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin, serous membranes and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.

DOSEAGE AND ADMINISTRATION. Inderal LA provides propranolol hydrochloride in a sustained-release capsule for administration once daily. If patients are switched from Inderal Tablets to Inderal LA Capsules, care should be taken to assure that the desired therapeutic effect is maintained. Inderal LA should not be considered a simple mg-for-mg substitute for Inderal. Inderal LA has different kinetics and produces lower blood levels. Retitration may be necessary, especially to maintain effectiveness at the end of the 24-hour dosing interval.

HYPERTENSION—Dosage must be individualized. The usual initial dosage is 80 mg Inderal LA once daily, whether used alone or added to a diuretic. The dosage may be increased to 120 mg once daily or higher until adequate blood pressure control is achieved. The usual maintenance dosage is 120 to 160 mg once daily. In some instances a dosage of 640 mg may be required. The time needed for full hypertensive response to a given dosage is variable and may range from a few days to several weeks.

ANGINA PECTORIS—Dosage must be individualized. Starting with 80 mg Inderal LA once daily, dosage should be gradually increased at three- to seven-day intervals until optimal response is obtained. Although individual patients may respond at any dosage level, the average optimal dosage appears to be 160 mg once daily. In angina pectoris, the value and safety of dosage exceeding 320 mg per day have not been established.

If treatment is to be discontinued, reduce dosage gradually over a period of a few weeks (see WARNINGS).

MIGRAINE—Dosage must be individualized. The initial oral dose is 80 mg Inderal LA once daily. The usual effective dose range is 160-240 mg once daily. The dosage may be increased gradually to achieve optimal migraine prophylaxis. If a satisfactory response is not obtained within four to six weeks after reaching the maximal dose, Inderal LA therapy should be discontinued. It may be advisable to withdraw the drug gradually over a period of several weeks.

HYPERTROPHIC SUBAORTIC STENOSIS—80-160 mg Inderal LA once daily.

PEDIATRIC DOSAGE—At this time the data on the use of the drug in this age group are too limited to permit adequate directions for use.

*The appearance of these capsules is a registered trademark of Ayerst Laboratories.

Reference:

1. Data on file, Ayerst Laboratories.

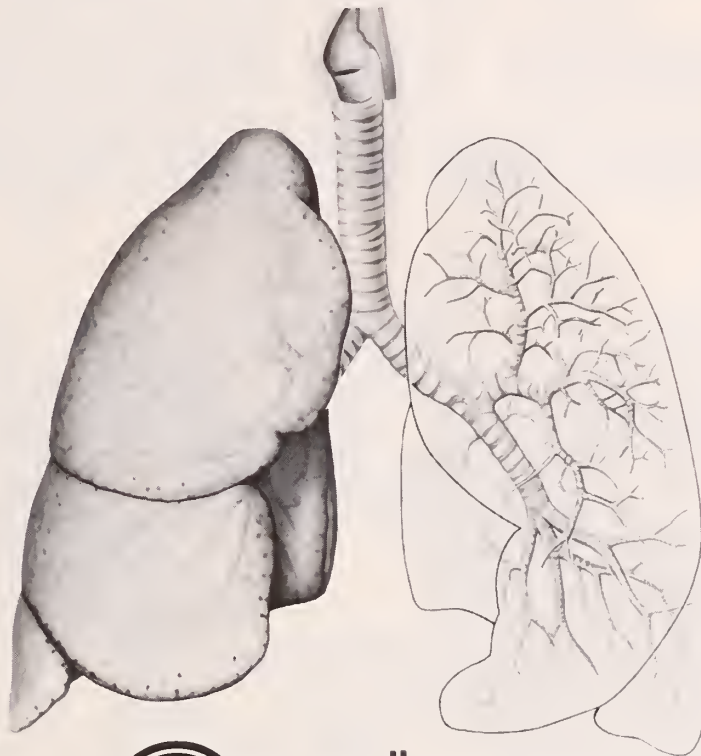
D7295/188

WYETH
AYERST

PHILADELPHIA, PA 19101

© 1988, Wyeth-Ayerst Laboratories.

Consider the causative organisms...



Ceclor[®]
cefactor

250-mg Pulvules[®] t.i.d.

**offers effectiveness against
the major causes of bacterial bronchitis**

Haemophilus influenzae and *Streptococcus pneumoniae*
(ampicillin-susceptible and ampicillin-resistant)

Note: Ceclor is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information.

Ceclor[®] (cefactor)

Summary. Consult the package literature for prescribing information.

Indication: Lower respiratory infections, including pneumonia, caused by *Streptococcus pneumoniae*, *Haemophilus influenzae*, and *Streptococcus pyogenes* (group A β -hemolytic streptococci).

Contraindication:
Known allergy to cephalosporins.

Warnings:

CECLOR SHOULD BE ADMINISTERED CAUTIOUSLY TO PENICILLIN-SENSITIVE PATIENTS. PENICILLINS AND CEPHALOSPORINS SHOW PARTIAL CROSS-ALLERGENICITY. POSSIBLE REACTIONS INCLUDE ANAPHYLAXIS.

Administer cautiously to allergic patients. Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics. It must be considered in differential diagnosis of antibiotic-associated diarrhea. Colon flora is altered by broad-spectrum antibiotic treatment, possibly resulting in antibiotic-associated colitis.

Precautions:

- Discontinue Ceclor in the event of allergic reactions to it.
- Prolonged use may result in overgrowth of nonsusceptible organisms.
- Positive direct Coombs' tests have been reported during treatment with cephalosporins.
- Ceclor should be administered with caution in the presence of markedly impaired renal function. Although dosage adjustments in moderate to severe renal impairment are usually not required, careful clinical observation and laboratory studies should be made.
- Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.
- Safety and effectiveness have not been determined in pregnancy, lactation, and infants less than one month old. Ceclor penetrates mother's milk. Exercise caution in prescribing for these patients.

Adverse Reactions: (percentage of patients)

Therapy-related adverse reactions are uncommon. Those reported include:

- Gastrointestinal (mostly diarrhea): 2.5%.
- Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment.
- Hypersensitivity reactions (including morbilliform eruptions, pruritus, urticaria, and serum-sickness-like reactions that have included erythema multiforme [rarely, Stevens-Johnson syndrome] or the above skin manifestations accompanied by arthritis, arthralgia and, frequently, fever): 1.5%; usually subside within a few days after cessation of therapy. Serum-sickness-like reactions have been reported more frequently in children than in adults and have usually occurred during or following a second course of therapy with Ceclor. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.
- Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.
- As with some penicillins and some other cephalosporins, transient hepatitis and cholestatic jaundice have been reported rarely.
- Rarely, reversible hyperactivity, nerv-

ousness, insomnia, confusion, hypertonia, dizziness, and somnolence have been reported.

- Other: eosinophilia, 2%; genital pruritus or vaginitis, less than 1%; and, rarely, thrombocytopenia.

Abnormalities in laboratory results of uncertain etiology

- Slight elevations in hepatic enzymes.
- Transient fluctuations in leukocyte count (especially in infants and children).
- Abnormal urinalysis; elevations in BUN or serum creatinine.
- Positive direct Coombs' test.
- False-positive tests for urinary glucose with Benedict's or Fehling's solution and Clinitest[®] tablets but not with Tes-Tape[®] (glucose enzymatic test strip, Lilly).

[061787L]
PA 0709 AMP

©1987 ELI LILLY AND COMPANY CR-5005-B-849318



Additional information available to the profession on request from Eli Lilly and Company, Indianapolis, Indiana 46285

Eli Lilly Industries, Inc.
Carolina, Puerto Rico 00630

THE ARMY RESERVE OFFERS NEW FINANCIAL INCENTIVES FOR RESIDENTS.



If you are a resident in Anesthesiology or Surgery*, the Army Reserve has a new and exciting opportunity for you. The new Specialized Training Assistance Program will provide you with financial incentives while you're training in one of these specialties.

Here's how the program can work for you. If you qualify, you may be selected to participate in the Specialized Training Program. You'll serve in a local Army Reserve medical unit with flexible scheduling so it won't interfere with your residency

training, and in addition to your regular monthly Reserve pay, you'll receive a stipend of \$644 a month.

You'll also have the opportunity to practice your specialty for two weeks a year at one of the Army's prestigious Medical Centers.

Find out more about the Army Reserve's new Specialized Training Assistance Program.

Call or write your US Army Medical Department Reserve Personnel Counselor:

**ARMY RESERVE MEDICINE
2100 6TH AVE. SOUTH
SUITE 303
BIRMINGHAM, AL 35205
(205) 930-9719 COLLECT**

* General, Orthopaedic, Neuro, Colon/Rectal, Cardio/Thoracic, Pediatric, Peripheral/Vascular, or Plastic Surgery.

ARMY RESERVE MEDICINE. BE ALL YOU CAN BE.

DATELINE

Council Requests Study Of Ethical Issues

Jackson, MS - MSMA's Council on Medical Service will request the House of Delegates at the 120th Annual Session to authorize a statewide committee to study ethical issues facing physicians. Among topics in the study, which will be coordinated with the ethics project of the Health Policy Agenda for the American People, will be: access to scarce technology, privacy and access to health records, and the role of local ethics committees.

Law Mandates Health Insurance Coverage

Boston, MA - The first universal health care bill guaranteeing health insurance to all state residents has been approved in Massachusetts. January 1, 1992 is the deadline for businesses in that state to begin offering health insurance to their employees. Failure to do so will result in a surcharge, which will allow state-provided coverage for uninsured employees.

New Book Describes U.S. Alcoholism Problem

San Francisco, CA - Alcoholism in the U.S. surpasses addiction to all other drugs combined, and of the 10 million alcoholics, only 20% get formal treatment. That is the conclusion of the author of From Denial to Recovery. He also notes that although alcoholism ranks third behind coronary disease and cancer as the nation's most serious health problem, 71% of physicians do not feel competent to work with alcoholic patients.

Asbestos in Children's Lungs

Chicago, IL - A study in the May Archives of Pathology and Laboratory Medicine hints at an association between asbestos exposure and Sudden Infant Death Syndrome and bronchopulmonary dysplasia. Although no evidence exists for a causal relationship, the finding of asbestos particles in the lungs of 10 of 46 autopsied babies suggests "exposure immediately after birth." Of the 10 infants, seven were diagnosed with SIDS; three with BPD.

Mumps on the Increase In the United States

Chicago, IL - There has been a resurgence of mumps in the U.S. since 1986, says a report in May's American Journal of Diseases of Children. It appears not to be due to waning vaccine-induced immunity, but to "failure to vaccinate all susceptible persons, especially those who are now between 10 and 19 years old." The authors see a "relatively underimmunized cohort of children born between 1967 and 1977."

YOCON® YOHIMBINE HCl

Description: Yohimbine is a 3a-15a-20B-17a-hydroxy Yohimbine-16a-carboxylic acid methyl ester. The alkaloid is found in Rubiaceae and related trees. Also in Rauwolfia Serpentina (L) Benth. Yohimbine is an indolalkylamine alkaloid with chemical similarity to reserpine. It is a crystalline powder, odorless. Each compressed tablet contains (1/12 gr.) 5.4 mg of Yohimbine Hydrochloride.

Action: Yohimbine blocks presynaptic alpha-2 adrenergic receptors. Its action on peripheral blood vessels resembles that of reserpine, though it is weaker and of short duration. Yohimbine's peripheral autonomic nervous system effect is to increase parasympathetic (cholinergic) and decrease sympathetic (adrenergic) activity. It is to be noted that in male sexual performance, erection is linked to cholinergic activity and to alpha-2 adrenergic blockade which may theoretically result in increased penile inflow, decreased penile outflow or both.

Yohimbine exerts a stimulating action on the mood and may increase anxiety. Such actions have not been adequately studied or related to dosage although they appear to require high doses of the drug. Yohimbine has a mild anti-diuretic action, probably via stimulation of hypothalamic centers and release of posterior pituitary hormone.

Reportedly, Yohimbine exerts no significant influence on cardiac stimulation and other effects mediated by B-adrenergic receptors, its effect on blood pressure, if any, would be to lower it; however no adequate studies are at hand to quantitate this effect in terms of Yohimbine dosage.

Indications: Yocon® is indicated as a sympatholytic and mydriatic. It may have activity as an aphrodisiac.

Contraindications: Renal diseases, and patient's sensitive to the drug. In view of the limited and inadequate information at hand, no precise tabulation can be offered of additional contraindications.

Warning: Generally, this drug is not proposed for use in females and certainly must not be used during pregnancy. Neither is this drug proposed for use in pediatric, geriatric or cardio-renal patients with gastric or duodenal ulcer history. Nor should it be used in conjunction with mood-modifying drugs such as antidepressants, or in psychiatric patients in general.

Adverse Reactions: Yohimbine readily penetrates the (CNS) and produces a complex pattern of responses in lower doses than required to produce peripheral a-adrenergic blockade. These include, anti-diuresis, a general picture of central excitation including elevation of blood pressure and heart rate, increased motor activity, irritability and tremor. Sweating, nausea and vomiting are common after parenteral administration of the drug.^{1,2} Also dizziness, headache, skin flushing reported when used orally.^{1,3}

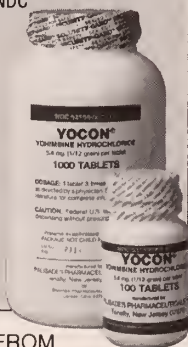
Dosage and Administration: Experimental dosage reported in treatment of erectile impotence.^{1,3,4} 1 tablet (5.4 mg) 3 times a day, to adult males taken orally. Occasional side effects reported with this dosage are nausea, dizziness or nervousness. In the event of side effects dosage to be reduced to 1/2 tablet 3 times a day, followed by gradual increases to 1 tablet 3 times a day. Reported therapy not more than 10 weeks.³

How Supplied: Oral tablets of Yocon® 1/12 gr. 5.4 mg in bottles of 100's NDC 53159-001-01 and 1000's NDC 53159-001-10.

References:

1. A. Morales et al., New England Journal of Medicine: 1221, November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

Rev. 1/85



AVAILABLE EXCLUSIVELY FROM
**PALISADES
PHARMACEUTICALS, INC.**
219 County Road
Tenafly, New Jersey 07670
(201) 569-8502
Outside NJ 1-800-237-9083

CARAFATE® (sucralfate) Tablets

BRIEF SUMMARY

CONTRAINDICATIONS

There are no known contraindications to the use of sucralfate

PRECAUTIONS

Duodenal ulcer is a chronic, recurrent disease. While short-term treatment with sucralfate can result in complete healing of the ulcer, a successful course of treatment with sucralfate should not be expected to alter the post-healing frequency or severity of duodenal ulceration.

Drug Interactions: Animal studies have shown that simultaneous administration of CARAFATE (sucralfate) with tetracycline, phenytoin, digoxin, or cimetidine will result in a statistically significant reduction in the bioavailability of these agents. The bioavailability of these agents may be restored simply by separating the administration of these agents from that of CARAFATE by two hours. This interaction appears to be nonsystemic in origin, presumably resulting from these agents being bound by CARAFATE in the gastrointestinal tract. The clinical significance of these animal studies is yet to be defined. However, because of the potential of CARAFATE to alter the absorption of some drugs from the gastrointestinal tract, the separate administration of CARAFATE from that of other agents should be considered when alterations in bioavailability are felt to be critical for concomitantly administered drugs.

Carcinogenesis, Mutagenesis, Impairment of Fertility: Chronic oral toxicity studies of 24 months' duration were conducted in mice and rats at doses up to 1 gm/kg (12 times the human dose). There was no evidence of drug-related tumorigenicity. A reproduction study in rats at doses up to 38 times the human dose did not reveal any indication of fertility impairment. Mutagenicity studies were not conducted.

Pregnancy: Teratogenic effects. Pregnancy Category B. Teratogenicity studies have been performed in mice, rats, and rabbits at doses up to 50 times the human dose and have revealed no evidence of harm to the fetus due to sucralfate. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

Nursing Mothers: It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when sucralfate is administered to a nursing woman.

Pediatric Use: Safety and effectiveness in children have not been established.

ADVERSE REACTIONS

Adverse reactions to sucralfate in clinical trials were minor and only rarely led to discontinuation of the drug. In studies involving over 2,500 patients treated with sucralfate, adverse effects were reported in 121 (4.7%).

Constipation was the most frequent complaint (2.2%). Other adverse effects, reported in no more than one of every 350 patients, were diarrhea, nausea, gastric discomfort, indigestion, dry mouth, rash, pruritus, back pain, dizziness, sleepiness, and vertigo.

OVERDOSAGE

There is no experience in humans with overdosage. Acute oral toxicity studies in animals, however, using doses up to 12 gm/kg body weight, could not find a lethal dose. Risks associated with overdosage should, therefore, be minimal.

DOSAGE AND ADMINISTRATION

The recommended adult oral dosage for duodenal ulcer is 1 gm four times a day on an empty stomach.

Antacids may be prescribed as needed for relief of pain but should not be taken within one-half hour before or after sucralfate.

While healing with sucralfate may occur during the first week or two, treatment should be continued for 4 to 8 weeks unless healing has been demonstrated by x-ray or endoscopic examination.

HOW SUPPLIED

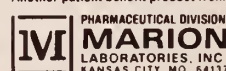
CARAFATE (sucralfate) 1-gm tablets are supplied in bottles of 100 (NDC 0088-1712-47) and in Unit Dose Identification Paks of 100 (NDC 0088-1712-49). Light pink scored oblong tablets are embossed with CARAFATE on one side and 1712 bracketed by C's on the other.

Issued 1/87

References:

1. Korman MG, Shaw RG, Hansky J, et al. *Gastroenterology* 80:1451-1453, 1981.
2. Korman MG, Hansky J, Merrett AC, et al. *Dig Dis Sci* 27:712-715, 1982.
3. Marksstaetter G, Kratochvil P. *Am J Med* 79 (suppl 2C):36-38, 1985.
4. Brandt IN, Wright JP, Gilinsky NH, et al. *J Clin Gastroenterol* 8:419-423, 1986.
5. Lam SK, Hui WM, Lau WY, et al. *Gastroenterology* 92:1193-1201, 1987.

Another patient benefit product from



0825A8

Ulcer therapy that won't yield, even to smoking



What do you do for duodenal ulcer patients who should stop smoking, but won't? Both cimetidine¹ and ranitidine² have been shown less effective in smokers than nonsmokers.

Choose CARAFATE® (sucralfate/Marion). Two recent studies show Carafate to be as effective in smokers as nonsmokers.^{3,4} A difference further illustrated in a 283-patient study comparing sucralfate to cimetidine⁵:

Ulcer healing rates:
(at four weeks of therapy)⁵

Sucralfate:

All patients	79.4%
Smokers	81.6%*

Cimetidine:

All patients	76.3%
Smokers	62.5%

*Significantly greater than cimetidine smoker group ($P < .05$).

Carafate has a unique, nonsystemic mode of action that enhances the body's own ulcer healing ability and protects the damaged mucosa from further injury.

When your ulcer patient is a smoker, prescribe the ulcer medication that won't go up in smoke: safe, nonsystemic Carafate.

Nothing works like

CARAFATE®
sucralfate/Marion

Please see adjoining page for references and brief summary of prescribing information.

0825A8



ALLAN J. HAMILTON, M.D.

Neurosurgical Resident and Research Fellow,
Massachusetts General Hospital, Boston, Massachusetts.
Captain, U.S. Army Reserve.

EDUCATION Ithaca College, B.A. (Magna Cum Laude);
Hamilton College (Pre-med); Harvard Medical School.

RESIDENCY General Surgical Internship. Neurosurgical
Residency, Massachusetts General Hospital.

CONTINUING EDUCATION Neurology and Neuro-
surgery Research Fellowship Training, National Institutes
of Health.

OUTSTANDING ACHIEVEMENTS Olsen Memorial
Fellowship, National Masonic Medical Research Foundation;
Albert Schweitzer Fellowship, International Albert Schweitzer
Foundation; Harvard Medical School Cabot Prize for Best
Senior Thesis; recently published article, "Who Shall Live
and Who Shall Die" in Newsweek Magazine.

“The work I’m doing in the Army Reserve fits perfectly with my academic research interests in civilian life. The Army is very concerned with the effects of high-altitude cerebral edema, which is a mirror model of cerebral hypoxia, something I deal with every day in our neurosurgical intensive care unit. I couldn’t ask for a smoother transition. And that’s true for a lot of Reserve physicians. All we really do is change our clothes, not our mindset.

“Some of the projects the Army is undertaking are on the cutting edge of research. For example, I’m currently involved in developing for the Army a prototype of a non-invasive intracranial pressure-monitoring device that we hope will allow us to measure pressure changes as the brain swells—without drilling holes in the skull. If we can get our design to work, such a device could revolutionize high-altitude medicine as well as civilian neurosurgical care.

“The quality of medicine and the caliber of people I’ve been associated with in the Army Reserve are, without question, equal to civilian hospitals. In fact, I’m giving serious consideration to applying for an active duty academic position in Army Medicine when my residency ends at Massachusetts General.”

Find out more about the medical opportunities in the Army Reserve. Call toll free 1-800-USA-ARMY.



Soldier being examined for effects of high-altitude cerebral edema

**ARMY RESERVE MEDICINE.
BE ALL YOU CAN BE.**

MEETINGS

National and Regional

American Medical Association, Annual Meeting, June 26-30, 1988, Chicago. James H. Sammons, Executive Vice President, 535 N. Dearborn St., Chicago, IL 60610.

State and Local

Mississippi State Medical Association, 120th Annual Session, June 15-19, 1988, Biloxi. Charles L. Mathews, Executive Secy., 735 Riverside Drive, P.O. Box 5229, Jackson 39216.

Mississippi Academy of Family Physicians, Annual Meeting, July 27-30, 1988, Biloxi. Mrs. Alyce Palmore, Executive Secy., P.O. Box 12330, Jackson 39211.

Amite-Wilkinson Counties Medical Society, 3rd Monday, March, June, September, December. James S. Poole, Secy., The Gloster Clinic, Gloster 39638. Counties: Amite, Wilkinson.

Central Medical Society, 1st Tuesday, February, April, October, December, 6:30 p.m., Primos Northgate Restaurant, Jackson. Patsy Douglas, Executive Secy., 735 Riverside Dr., Jackson, MS 39202. Counties: Hinds, Leake, Madison, Rankin, Scott, Simpson.

Claiborne County Medical Society, 1st Tuesday, each month, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Secy., P.O. Box 147, Port Gibson 39150. County: Claiborne.

Clarksdale and Six Counties Medical Society, 3rd Wednesday, April, and 1st Wednesday, November, 2:00 P.M., Clarksdale, Rodney Baine, Secy., 110 Yazoo Ave., Clarksdale 38614. Counties: Coahoma, Quitman, Tallahatchie, Tunica.

Coast Counties Medical Society, January, May, and November. H. S. Barrett, Secy., P.O. Box 1810, Gulfport 39501. Counties: Hancock, Harrison, Stone.

Delta Medical Society, 2nd Wednesday, April and October. Walter H. Rose, Secy., 122 E. Baker St., Indianola 38751. Counties: Bolivar, Humphreys, Leflore, Sunflower, Washington, Yazoo.

DeSoto County Medical Society, 3rd Thursday, February and August, 1:00 p.m., Kenny's Restaurant, Hernando. Malcolm D. Baxter, Jr., Secy., Baxter Clinic, Hernando 38632. County: DeSoto.

East Mississippi Medical Society, 1st Tuesday, February, April, June, October, December. Charles L. Wilkinson, Secy., Mail: Ms. Jenkins, P.O. Box 4053, Meridian 39305. Counties: Clarke, Kemper, Lauderdale, Neshoba, Newton, Winston.

Homochitto Valley Medical Society, Meetings scheduled quarterly. Fred G. Emrick, Secy., P.O. Box 1488, Natchez 39120. Counties: Adams, Jefferson.

North Central District Medical Society, 3rd Wednesday, March, June, September, January. George V. Smith, 905 Avert Dr., Grenada 38901. Counties: Attala, Carroll, Choctaw, Grada, Holmes, Montgomery, Webster.

Northeast Mississippi Medical Society, 1st Thursday, March, June, September, December. Roger L. Lowery, Secy., 618 Pegram Dr., Tupelo 38801. Counties: Alcorn, Calhoun, Chickasaw, Itawamba, Lee, Monroe, Pontotoc, Prentiss, Tishomingo, Union.

North Mississippi Medical Society, 1st Thursday, April, September, December. W. A. Spencer, Secy., 2161 South Lamar, Oxford 38655. Counties: Benton, Lafayette, Marshall, Panola, Tate, Tippah, Yalobusha.

Pearl River County Medical Society, 2nd Monday, March, June, September, December. J. C. Griffing, Secy., Crosby Memorial Hospital, Picayune 39466. County: Pearl River.

Prairie Medical Society, 2nd Tuesday, March, June, September, December. Perrin N. Smith, Secy., P.O. Box 9000, Columbus 39705. Counties: Clay, Oktibbeha, Noxubee, Lowndes.

Singing River Medical Society, meet quarterly. Owen P. Phillips, Secy., 208 Doctors Plaza, Pascagoula 39567. County: Jackson.

South Central Mississippi Medical Society, 2nd Tuesday, March, June, September, December. Julian T. Janes, Secy., 304 Clark, McComb 39648. Counties: Copiah, Franklin, Lawrence, Lincoln, Pike, Walthall.

South Mississippi Medical Society, 2nd Thursday, March, June, September, December. George R. Bush, Secy., 307 S. 13th Ave., Laurel 39440. Counties: Covington, Forrest, George, Greene, Jasper, Jefferson Davis, Jones, Lamar, Marion, Perry, Smith, Wayne.

West Mississippi Medical Society, 2nd Tuesday, January, March, May, September, October, November, 6:30 p.m., Maxwell's Restaurant, Vicksburg. Wayne M. Petrie, Secy., 1202 Mission Park Dr., Vicksburg 39180. Counties: Issaquena, Sharkey, Warren.

Mississippi Institutions and Organizations Accredited for Continuing Medical Education

The following Mississippi institutions and medical organizations have been accredited in accordance with the "Essentials for Accreditation of Institutions and Organizations Offering Continuing Medical Education Programs" of the Liaison Committee on Continuing Medical Education. Information concerning CME programs for physicians offered by these accredited sources may be obtained by writing the Director, Continuing Medical Education, at the individual institution or organization.

Council on Scientific Assembly
Mississippi State Medical Association
735 Riverside Drive
Jackson, MS 39202

North Mississippi Medical Center
830 Gloster Avenue
Tupelo, MS 38801

Forrest General Hospital
Box 1897
Hattiesburg, MS 39401

Mississippi Baptist Medical Center
1225 N. State Street
Jackson, MS 39201

Gulf Coast Community Hospital
4642 W. Beach Boulevard
Biloxi, MS 39531

Jefferson Davis Memorial Hospital
Box 1488
Natchez, MS 39120

King's Daughter Hospital
Box 948
Brookhaven, MS 39601

Riverside Hospital
Lakeland Drive
Jackson, MS 39208

Biloxi Regional Medical Center
1559 Lafayette St.
Biloxi, MS 39533

Jeff Anderson Regional Medical Center
2124 14th St.
Meridian, MS 39301

Northwest Mississippi Regional Medical Center
Box 1218
Clarksdale, MS 38614

North Panola County Hospital
Drawer 160
Sardis, MS 38666

Singing River Hospital
P.O. Box 112
Pascagoula, MS 39567

Magnolia Hospital
Alcorn Drive
Corinth, MS 38834

Greenwood Leflore Hospital
1508 Leflore Avenue
Greenwood, MS 38930

Gulfport Memorial Hospital
4500 13th Street
Gulfport, MS 39501

Oxford-Lafayette County Hospital
P.O. Box 946
Oxford, MS 38655

St. Dominic-Jackson Memorial Hospital
969 Lakeland Dr.
Jackson, MS 39216

Delta Medical Center
P.O. Box 5247
Crossroads Station
Greenville, MS 39704-5247

Methodist Hospital
P.O. Box 1311
Hattiesburg, MS 39401



“When I realized my chances of becoming disabled by age 65 were *three times greater* than the chances of death . . .

I compared disability insurance plans. And I decided that my MSMA-endorsed disability insurance plan

SERVES ME BEST!

It’s not group insurance, but an individually-owned policy which is *non-cancellable* and *guaranteed renewable*.”

If you’re a member of the Mississippi State Medical Association you may be eligible for this outstanding professional disability plan at *discounted premiums*.

- Non-cancellable, guaranteed renewable
- Medical specialty protection
- Presumptive loss provision
- Indexing of prior earnings
- Waiver of premium
- Cost of living rider
- Future disability insurance option
- Lifetime accident and sickness rider
- Total and residual disability protection

Offered by Paul Revere Insurance Company to MSMA members through its exclusive representatives, Professional Disability Specialists.

Jon B. Wimbish, Disability Specialist

1501 Lakeland Drive, Suite 200 Jackson, MS 39216 Telephone 362-9800

ORIGINAL PAPERS

A Burning Issue: Attitudes Towards Environmental Tobacco Smoke

DAVID R. THOMAS, M.D.

F. E. THOMPSON, JR., M.D., M.P.H.

BRUCE T. BRACKIN, M.P.H.

ELLEN SHEA JONES, M.S.

Jackson, Mississippi

CIGARETTE SMOKING is the single most important cause of preventable morbidity and premature mortality in the United States. The prevalence of smokers has been declining in the population, from 37% in 1976 to 30% in 1985.¹ Simultaneously, there has been increasing concern over the health risks of involuntary or "passive" smoking among nonsmokers exposed to tobacco products in public areas.

Environmental tobacco smoke in indoor areas is an irritant to many nonsmokers. Public attitudes and social support structure for smoking has been rapidly changing, resulting in pressure for laws regulating smoking in public places. Currently 37 states and over 400 municipalities regulate smoking in public areas to varying extent.

To measure attitudes of Mississippi residents towards regulation of public cigarette smoking we surveyed a representative statewide sample of 878 adult residents.

Methods

Interviews were conducted with Mississippi residents 18 years of age or older using a telephone

Exposure to environmental tobacco smoke has been an increasing concern among nonsmokers, leading to regulation of smoking in public places in 37 states. As the prevalence of cigarette smoking declines nationally, the nonsmoking majority have become less tolerant of sharing indoor space with smokers. To assess attitudes toward involuntary exposure to tobacco products among Mississippians, a representative statewide survey of 878 respondents was conducted. Regulation of smoking in public areas was strongly favored by 85.6% of respondents, including 71.4% of current smokers. Cigarette smoke was felt to be an irritant by 78.6% of nonsmokers. Of those surveyed, 74% of all adults thought that smokers should not light up in the presence of nonsmokers. These survey results suggest Mississippians would support legislation and health promotion activities to reduce smoking in public places.

From the Division of General Medicine, Department of Medicine, University Medical Center, Jackson, MS and The Mississippi State Department of Health, Jackson, MS.

questionnaire. The questionnaire asked three questions relating to smoking: "Should smokers refrain from smoking in the presence of nonsmokers?";

“Does cigarette smoke from others irritate you?”; and “What do you think about laws regulating smoking in public places where smokers and non-smokers mix? Which of these three statements best describes the way you feel about smoking in public places? (1) smoking should be totally banned from public places, (2) smoking should be allowed only in certain areas in public places, (3) there should be no regulation of smoking in public places.” Each of the questions allowed for a “no opinion” response.

A sample of the population was obtained by a stratified random selection process using each telephone exchange in the state listed by county. The number of residents was selected from each county telephone exchange proportionate to the 1985 population census for that county. A sample size of 1026 telephone numbers representative of the state population was drawn, excluding the Jackson Metropolitan area. A total of 759 interviews were completed, a response rate of 74%.

The results were combined with a random sample of 355 Jackson metropolitan area telephone interviews using an N + 2 stratification process. A combined total of 878 interviews were available for analysis. Information on age, sex, race, and smoking status was obtained for demographic analysis.

The age of the respondents was 48 +/– 19 years with a range of 18 to 99 years old. Sixty-seven percent of those interviewed were women and 69% were white. Registered voters totaled 88.2% of the population. There were no differences among the Jackson metropolitan area residents in any respect except for race, where 52.5% of the population was white.

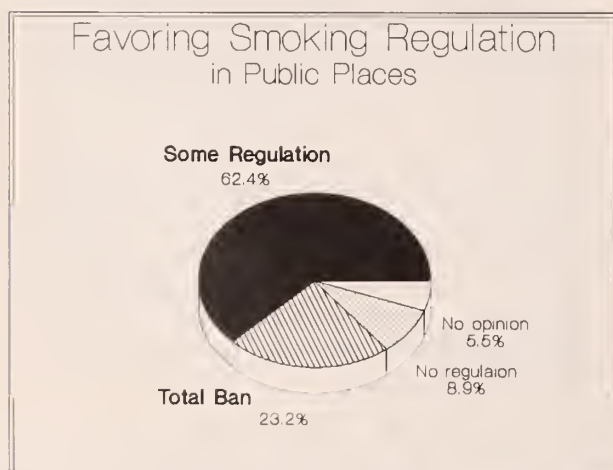


Figure 1. Mississippi Residents Survey.

Results

Mississippians strongly favor regulation of smoking in public places. Regulation or banning of smoking was favored by 85.6% of all Mississippi adults while only 8.9% thought that there should be no regulation at all. A total ban on smoking in public places was preferred by 23.2% of all adults (See Figure 1). Among nonsmokers, feelings were stronger, with 91% endorsing regulation or ban in public places and 28.5% feeling that smoking should be totally banned. Surprisingly, even 71.4% of current smokers agreed that smoking should be regulated in public places. Only 11.6% of current smokers thought that smoking should be totally banned.

Smoking courtesy was also strongly favored by Mississippians. Seventy-four percent of all adults felt that smokers should refrain from smoking in the presence of nonsmokers. More nonsmokers (85.5%) thought that smokers should not light up. Among current smokers, 57.1% agreed that smokers should refrain from smoking in the presence of nonsmokers (See Table 1).

Cigarette smoke was irritating to 65.1% of all adults. As expected, more nonsmokers (78.6%) than smokers complained that smoke was irritating. Amazingly, 32.7% of current smokers also complained that smoke from others was irritating to them (See Table 2).

The proportion of current smokers among Mississippi adults is low. Only 22.7% of those polled reported being current smokers, compared to 58.3% of adults who reported nonsmoking status. Nineteen percent of Mississippians in this survey have quit smoking.

The percentage of men smoking in this survey was 29.4%, while 19.4% of women are current smokers. Nonsmokers among men make up 42.6% of the population and 67.0% of women are nonsmokers. The percentage of former smokers is higher for men (28.0%) than for women (14.6%).

Data from this survey confirm national trends. Smoking is becoming increasingly unpopular. In 1976, 37% of the U.S. adult population were smokers. In 1986, only 30% of the population still smokes. The percentage of Mississippi adult smokers in this survey is 22.7%. Currently, the national percentages of male smokers is 33% and the percentage of women smokers, 28%. Data from the National Cancer Institute project a decrease in smoking prevalence to 15% by the year 2000. (See Figure 2).

Attitudes towards regulation of smoking in public places and smoking courtesy among Mississippians are consistent with national trends. Between 1983

TABLE 1
MISSISSIPPI RESIDENTS SURVEYED
SHOULD SMOKERS REFRAIN FROM SMOKING IN THE
PRESENCE OF NONSMOKERS?

	Yes %	No %
All Adults	74.0	21.2
Nonsmokers	85.5	13.1
Former Smokers	49.3	49.3
Current Smokers	57.1	39.3

TABLE 2
MISSISSIPPI RESIDENTS SURVEYED
DOES CIGARETTE SMOKE FROM OTHERS IRRITATE YOU?

	Yes %	No %
All Adults	65.1	34.9
Nonsmokers	78.6	21.4
Former Smokers	62.3	37.7
Current Smokers	37.2	67.3

and 1985, national surveys indicated that the percentage of people who felt that smokers should not smoke in the presence of nonsmokers increased from 69% to 75%. A recent Gallup poll found that 79% of all Americans, including 76% of smokers, thought that smoking should be confined to designated areas in the workplace. A total ban on smoking at work was favored by 8%.

Discussion

Cigarette smoking has been identified as the single most important source of premature morbidity and preventable mortality in each of the reports of the Surgeon General since 1964. The estimated annual excess mortality from cigarette smoking in the United States is 350,000, more than the total number of American lives lost in World War I, Korea and Vietnam combined and almost as many as were lost during World War II.²

The health hazards of smoking are well-documented, with increases in mortality and morbidity from coronary artery disease; peripheral vascular disease; carcinoma of the lung, larynx, oral cavity, esophagus, bladder, and pancreas; chronic lung disease; dental disease; and harmful effects on fetal development.³

The American public is aware of the dangers of smoking. In a national sample of 12,000 people,

over 80% of respondents recognized that smoking was detrimental to their health.⁴ Perhaps for this reason the prevalence of smokers has been declining steadily nationwide since 1964.

Health Risks of Passive Smoking

Evidence has been accumulating that smokers not only endanger their own health but also the health of nonsmokers. Involuntary smoking or "passive" smoking is the inhalation of the smoke of tobacco products in an indoor environment. The issue of exposure to involuntary smoking is in part responsible for developing restrictions on smoking in public places and the growing concern of nonsmokers.

Environmental tobacco smoke comes from two sources: "mainstream" smoke exhaled from the smoker and "sidestream" smoke from the burning end of the cigarette. Sidestream smoke is quantitatively different from mainstream smoke. Sidestream smoke contains a higher concentration of potentially dangerous gas-phase constituents such as carbon monoxide and nicotine. Nearly 85% of smoke in an indoor room occupied by a cigarette smoker is sidestream smoke. The level of nicotine in nonsmokers exposed in a workspace shared with a smoker is similar to the concentration of nicotine found in light smokers (1 to 10 cigarettes).⁵

Exposure to this level of smoke from tobacco products has been an increasing concern among nonsmokers. The most commonly reported effects of passive smoking among healthy adults are eye irritation (69 percent), headaches (32 percent), nasal symptoms (29 percent), and cough (25 percent).⁶ For those people with respiratory allergies or pre-existing medical conditions, the effects of environmental tobacco smoke can cause more profound symptoms. In this survey, 78.6% of nonsmoking Mississippians reported irritation, physical or otherwise, from tobacco smoke.

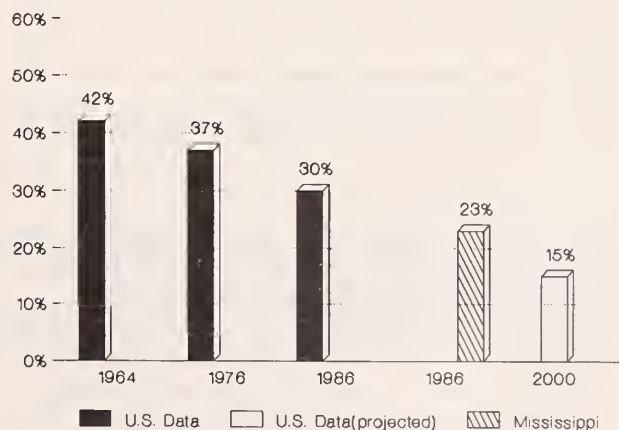


Figure 2. Percent of Smokers.

The most alarming consequence of exposure to passive smoke is an increase in lung cancer risk. Chronic exposure to passive smoking carries at least a relative risk of 1.34, and the risk may be higher.⁷ Increased cancer risk has been studied primarily in spouses of smokers, but this same level of exposure can occur in a closed workplace shared by smokers and nonsmokers over an eight-hour shift.⁵

Among other documented health effects of passive smoking are an increase in bronchitis and pneumonia in children of parents who smoke,⁸ a decrease of up to 40% in the interval between the start of exercise and angina in patients with heart disease,⁹ and a decrease in small-airways function in nonsmokers.¹⁰

Nonsmokers are becoming more sensitive to exposure to environmental tobacco smoke. The source of this sensitivity may be due to these health concerns or to the local irritation caused from cigarette smoke.

Public Health and Passive Smoking

Public health and healthcare practitioners can take much credit for the reductions in smoking prevalence in the United States. However, as smoking prevalence declines there is an increasingly hard-core group of smokers resistant to smoking cessation intervention simply because those who can give up smoking easily have already done so.

In addition, among women and the young, smoking rates have not declined as remarkably. Each day 3,000 to 5,000 children smoke a cigarette for the first time.¹¹ Except for young females, smoking has declined among all major age, race, and sex groups. More adolescent girls now smoke than boys, although both are smoking less than 10 years ago.¹

Physicians have been the mainstay of smoking prevention but have at times been frustrated by seemingly poor compliance. Advice to quit smoking by physicians does work. In some trials, clinical intervention has been successful in 51% of patients.¹² An American Cancer Society survey showed that 70% of those smoking more than one pack per day said that they would quit if their physicians advised them to do so.¹³ Over 90% of smokers wish to quit, and the majority have tried one or more times.¹⁴ Yet, only 66% of physicians advise most of their patients to quit smoking, largely due to pessimism about the efficacy of this advice.¹⁵

Public policy has been a major factor in smoking cessation. As a result of state and local clean-indoor-air laws, smokers and nonsmokers are increasingly separated in society. Rental cars for nonsmokers, hotel rooms reserved for nonsmokers, airlines for

TABLE 3
WHO STILL SMOKES?

	Men %	Women %
<i>Marital Status</i>		
Married	33.6	27.5
Separated/divorced	51.9	45.4
<i>Education</i>		
No High school	36.6	21.5
High school grad	37.1	32.3
Some college	31.0	26.4
<i>Race</i>		
White	33.4	28.7
Black	39.1	32.0
<i>Occupation</i>		
White collar	27.9	29.9
Blue collar	42.7	37.8
Farm	35.6	22.2

Source: National Center for Health Statistics

nonsmokers reinforce the idea that smokers are different and that nonsmokers wish to minimize their exposure. Nonsmokers discounts are offered by all major life insurance underwriters and extend to fire, health, homeowner and auto insurance policies. This cumulative effect of publicity and smoking policies has been estimated to account for a smoking prevalence in 1978 that was 40% lower than predicted.¹⁶

Despite progress in reducing smoking prevalence, cigarette consumption remains high. Who still smokes? About 54 million people (See Table 3).

Further progress in smoking cessation in the United States is hindered by (1) increasingly aggressive efforts by tobacco companies to make smokers believe that smoking causes no adverse health effects; (2) the addictive effects of nicotine; (3) the fact that lighter smokers have already quit, leaving a hard core of heavier smokers; (4) the undercutting of efforts to pass clean-indoor-air legislation by tobacco companies portraying smoking as an inalienable right on par with the Bill of Rights; (5) inadequate training of healthcare professionals in smoking cessation techniques; and (6) uneven corporate and public health support for smoking policies that discourage smoking.³

Conclusions

The goal of further reducing the risk of the single most important cause of preventable morbidity and premature mortality in the U.S. is one that should be strongly supported by Mississippi physicians.

Getting patients to quit smoking cigarettes in the face of known health risks is a difficult task for the concerned physician.

In the face of changing smoking demographics and strong support from both Mississippi nonsmokers and smokers alike, the most promising opportunity for physicians to accelerate the decline in smoking is support of change in the social support structure for smoking.

Many exsmokers report that social pressure was the principal factor in their decision to quit smoking and in their ability to make the decision stick. Health professionals can help by encouraging municipal, state, and federal executive and legislative bodies to enact clean-indoor-air acts. Public smoking policies are effective in aiding the continued awareness of health risks of smoking and encouraging future smokers not to start.¹⁶ This effect is demonstrable in spite of the fact that most statewide clean-indoor-air legislation have no penalty or mechanism of enforcement.

An agenda for healthcare professionals emerges from these smoking demographics. Healthcare professionals should direct a major effort towards preventing the young from starting to smoke. The development of community programs for smoking cessation should be encouraged, although these programs vary considerably in success and cost-effectiveness. Continuing advice from physicians for smokers to quit and education of patients "at risk" is effective on an individual basis.

Of all the strategies, the changing acceptance of smoking by Mississippians, as demonstrated by the results of this survey, is the healthcare professional's greatest ally. Among Mississippians surveyed, 85.6% felt that smoking should be regulated in public places. Of these, 88% were registered voters.

★★★

Acknowledgment

Supported in part by a grant from The Mississippi State Medical Association, The Mississippi Chapter of the American Lung Association, and The Mississippi Division of the American Cancer Society.

References

1. American Cancer Society. Bull. No 5650-LE, 1985.
2. Warner KE. The economics of smoking: dollars and sense. NY State J Med 83:1273-4, 1983.
3. Fielding JE. Smoking: Health effects and control. N Engl J Med 313:491-7, 555-61, 1985.
4. Eraker SA, Becker MH, Strecher VK, et al. Smoking behavior, cessation techniques, and the health decision model. Am J Med 78:817-25, 1985.
5. Feyerabend C, Higenbottam T, Russell MAH. Nicotine concentrations in urine and saliva of smokers and non-smokers. Br Med J 284:1002-4, 1982.
6. Speer F. Tobacco and the nonsmoker: a study of subjective symptoms. Arch Environ Health 16:443-6, 1968.
7. Environmental Tobacco Smoke: Measuring exposures and assessing health effects. Committee on Passive Smoking, Board of Environmental Studies and Toxicology, National Research Council, National Academy Press, Washington, DC, 1986.
8. Fergusson DM, Horwood LJ, Shannon FT, Taylor B. Parental smoking and lower respiratory illness in the first three years of life. J Epidemiol Community Health 35:180-4, 1981.
9. Aronow WS. Effect of passive smoking on angina pectoris. N Engl J Med 299:21-4, 1978.
10. White JR, Froeb HF. Small-airways dysfunction in non-smokers chronically exposed to tobacco smoke. N Engl J Med 302:720-23, 1980.
11. Cahan G. Smoking as a form of child abuse. Washington Post, May 22, 1985.
12. Rose G, Hamilton PJS. A randomized controlled trial of the effect on middle aged men of advice to stop smoking. J Epidemiol Community Health 32:275-81, 1978.
13. Am Cancer Soc, Bethesda, MD, Nat Inst Health, DHEW publication No. 79-1549, 1979.
14. Healthy People: The Surgeon General's report on health promotion and disease prevention. Rockville, MD: U.S. Department of Health and Human Services. 1979.
15. Orleans CT, George LK, Houtp JL, et al. Health promotion — A survey of primary care practitioners. N Engl J Med 308:97-100, 1983.
16. Cigarette smoking in the 1970's: The impact of the anti-smoking campaign on consumption. Science 211:729-31, 1981.

**For a special kind of office help,
come to the Source.**

OffiSource

Business Furnishings / Supplies / Machines
277 E. Pearl St. / Jackson, MS 39205
352-9000 / Toll-free 1-800-682-5399



Edouard C. (Ed) Carrere, Jr. attended St. Stanislaus from 1934-1939. He went on to become a partner in Ernest A. Carrere's Sons in New Orleans and has served on the Board of Directors of the American Red Cross, the Presidents Council of Loyola University, and as President of the Real Estate Commission of New Orleans.



"The virtues of honesty and integrity instilled in me at St. Stanislaus were the trademark of my business. My word is my bond."

To the Brothers of the Sacred Heart, every student is a potential leader. And giving him the proper example—spiritual, intellectual and moral—is our mission at St. Stanislaus.

S BOARDING SCHOOL GRADES 6-12
 SUMMER CAMP AGES 9-14
 304 South Beach Blvd. Bay St. Louis, MS 39520
SAINT STANISLAUS

St. Stanislaus helps build leaders.

FOR A FREE BROCHURE CALL THE DIRECTOR OF ADMISSIONS—(601) 467-9057.

The Relationship of Fibrocystic Disease to Breast Carcinoma

WILLIAM J. GIBSON, JR., M.D.
Jackson, Mississippi

A SMALL PERCENTAGE of patients with a fibrocystic condition have a distinct increase in breast carcinoma. The first item to consider is the natural history of breast carcinoma. Breast carcinoma, as with other epithelial neoplasias, has a variable course from inception to the development for the potential of metastatic disease and death of the patient. This time interval has been estimated to range from one year to 10 to 20 years. This was arrived at by measuring of doubling times. Apparently most breast carcinomas may have a very long doubling time (up to two hundred-plus days). Subsequently, the tumor seems to develop a more rapid doubling time, as short as 25 days. The amount of tumor burden seems to have a great deal to do with this.¹

The challenge to physicians managing patients with breast carcinoma is obviously early diagnosis because this does correlate with the patients' survival. There is a lot of therapeutic nihilism concerning early diagnosis because it may simply increase the lead time bias. It has been suggested that the patient's outcome is eventually still the same. This has been challenged because patients with minimal breast cancer and patients with T1 (less than 2 cm) lesions certainly have a much higher than expected survival rate. Survival rate of mammographic-found lesions, for example with lesions being between 0.5 and 1 cm, is in the range of 94% and 95%. These results have been accomplished with surgery alone, without adjunctive therapy.²

In considering risk factors in these patients, we must not separate the histopathology from the patient's family history. If the patient has atypical ductal hyperplasia and an associated family history

A small percentage of patients with a specific fibrocystic condition have a distinct increase in breast carcinoma. The author discusses the natural history of breast carcinoma, the importance of early diagnosis and family history, pathological classification of risk, and management of the high risk patient. Two illustrative case histories are presented.

of breast cancer, the incidence of carcinoma is markedly increased.

Family history is particularly important, and you must consider both sides of the family. In an autosomal dominant type of patient, it can be transmitted paternally as well as through the maternal side. It has been estimated that about 5% of the patients have a true autosomal dominant type of penetration of a major gene. It may be oncogene production; these families certainly should be sought after. There are a number of other syndromes, ovarian-breast, ovarian-sarcoma, ovarian-GI. In the past four to five years, there have been ongoing pilot studies, particularly at Sloan-Kettering where they are using biomarkers trying to actually measure estradiol and estriol levels. These apparently are associated with a marked increase again in the risk of subsequent carcinoma.³

The relationship between certain fibrocystic change and carcinoma has been noted as far back as 1940. It was found that patients who had cystic breast changes had approximately twofold increase in carcinoma. We went through a period of restricting hormonal replacement. For example, in patients with cystic changes, we avoided birth control pills. Now the philosophy on this has changed, and patients are allowed to have birth control pills or hor-

Presented before the Surgery Plenary Session, MSMA 119th Annual Session, June 5, 1987, Biloxi.
Dr. Gibson is engaged in the private practice of general surgery and oncology in Jackson, MS.

monal replacement, even with a history of fibrocystic problems. The term non-obligate precursor is probably the best overall descriptive case management that we can provide. Like the dysplastic nevus syndrome or some of the cervical dysplasias, apparently there is a group of hyperplasia changes, particularly the atypical hyperplasias of the ductal origin, that seems to be associated with subsequent carcinoma. These increased risks have been rated up to a high of 18 with an average of 3.98.⁴

The American College of Pathology and the American College of Surgeons have endorsed a pathological classification that is associated with increased risk. The most helpful view of this was written by David Page, a Nashville pathologist. He studied 10,000 patients and had a 17-year follow-up. He has clearly established the patients who are in gravest danger of developing breast carcinoma.^{5, 6}

Several factors need to be considered with regard to the individual case management of patients. Exactly how much do we tell the patient? The average person that we're seeing has not had a breast biopsy.

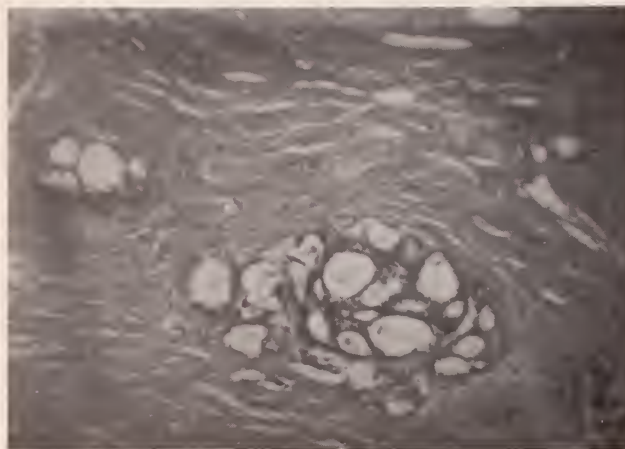


Figure 1. Atypical hyperplasia of a breast lobule.

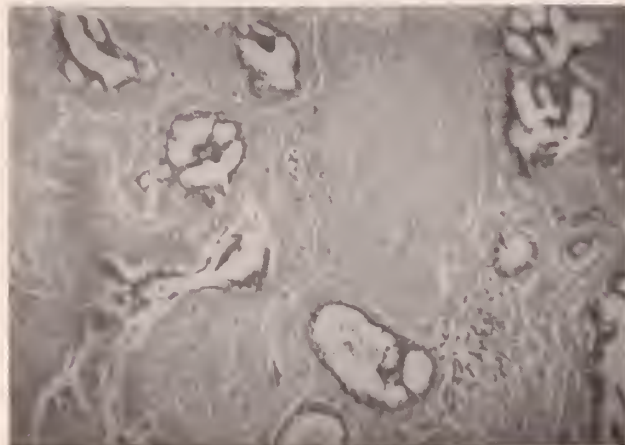


Figure 2. Atypical ductal hyperplasia.

And we have fairly crude measurements or ways of finding the underlying problem, producing a situation of unnecessary paranoia that can be fostered or contained by the physician's appropriate actions or inactions. Again we're dealing with a non-obligate situation and the whole picture really must be correlated.⁷

The highest risk for these patients with a strong genetic situation, the more dominant or the hereditary form combined with hyperplasia, is 25% to 50% are going to have carcinoma of the breast at some time interval. The time interval in patients with carcinoma in situ of the breast, like hyperplasia, can be a 10-20 year time interval.

There is a relationship between the mammographic pattern, histopathology, and subsequent risk for breast carcinoma. The D-Y pattern, which is often called dysplasia by the radiologist, is associated with an increased risk of breast carcinoma. This pattern has also been correlated with the atypical hyperplasia problem.

Problems in dealing with this include failure of the breast biopsy to provide adequate tissue sampling and evaluation. There are some fairly remarkable mapping studies that have been done by Japanese pathologists as well as whole organ studies done in this country by Gallagher and others showing the multifocality of the situation. Basically, breast cancer is starting as an epithelial neoplasia and probably occurs mostly in the terminal ducts and lobules. It seems to grow along the surface of these ductal structures and has areas of skip patterns. The second difficulty that I've encountered includes overcalling of a hyperplasia by enthusiastic pathologists or undercalling of invasive carcinoma of the breast in its earliest form, when trying to distinguish the severe hyperplasia from carcinoma in situ.^{8, 9} Interpretation of the breast biopsy must also be made with menstrual cycle and hormonal replacement.¹⁰

Case 1

The first patient referred to was 63 years old and had been taking hormonal supplementation since age 50. She presented an abnormal mammogram pattern of clustered microcalcifications and, on review of this histologically, it was signed out as severe atypical intraductal hyperplasia. After a two-year time frame, she then returned and had what appeared to be Paget's disease of the nipple. Subsequent biopsy, which was near and included part of the prior biopsy specimen, showed Paget's disease with an associated infiltrating intraductal carcinoma with multifocal intraductal carcinoma.

It's interesting to go back and mix the boxes of

slides together to try to pick out the hyperplasia slides vs. the carcinoma in situ. It was really a difficult case. It's to the credit of the pathologists, the effort and accuracy that they go to, that these difficult diagnoses are made. This patient subsequently underwent a mastectomy with immediate reconstruction and was found to have carcinoma in situ throughout the breast. The opposite breast was biopsied and had hyperplasia, but no atypia was noted. The patient did have an axillary dissection with her mastectomy.

The incidence of finding positive disease has been estimated to range from 1% to 18%. I'm not sure we're not overtreating the axillas in these patients but for now we will at least suggest node sampling of the "lower axillary nodes." It's difficult, however, to define the limits of the surgery as well when you do this.

Case 2

The next case is presented to show the non-obligate situation. The patient is 45 years old and had had breast biopsies at ages 39 and 41. Each time she was told that she had a precancerous situation. The patient has virtually lived in fear since that time and has had regular frequent checkups. Asked to see her for a second opinion, I reviewed the slides with the pathologist and certainly she had the atypical hyperplasia. She subsequently showed an area of increased firmness in mass in the breast with no change on the mammogram except showing a mass density. Excisional biopsy of a large area of the breast, about 4 cm by 4 cm in size, revealed simply stromal fibrosis with no proliferative changes and certainly no atypia noted in either of her bilateral breast biopsies.

It has been suggested that these high risk patients can be "chemo managed" and this includes the use of long term Tamoxifen anti-estrogen compound. This protocol is thought to be reducing the incidence of carcinoma in these patients.

Conclusion

The time interval between diagnosis of atypical ductal hyperplasia with subsequent risk of carcinoma may be as late as 15 to 17 years. This is similar to carcinoma in situ of the breast with lobular CA's and ductal CA's. An unanswered question is should these patients take their hormonal medications in a subsequent fashion such as estrogen-progesterone combinations. There has been some suggestion in the previous literature that we were not doing our patients a disservice by providing these,

but I don't know of any study that really selects only patients with atypical hyperplasia and follows these long term to see what their real risk is.

What should be the types and frequency of surveillance? The American College of Radiology and American Cancer Society have suggested yearly mammography is of benefit in the postmenopausal 50-year-old plus patients. There is quite a bit of conflicting data that shows that two years may be the ideal length of surveillance by mammography. Other modalities, including ultrasonography, may help in the future. Current investigations using the MRI with monoclonal antibody radiolabeled studies may be helpful. The biomarker blood profile and certainly a careful genetic history are crucial to management of these patients. How often should the patient have just a routine breast exam? In the breast cancer surveillance projects, most programs are now doing examinations three times a year.

The relationship between certain fibrocystic changes and subsequent carcinoma is now clearly defined. The incidence in the general population should be approximately 5-10%. The patients with atypical ductal hyperplasia with a genetic history should be screened in order to find more minimal breast cancer and T1 lesions, thus improving survival in these patients. ★★★

Suite 401, 1421 North State Street (39202)

References

1. Hall, Ferris M.: Screening mammography-potential problems on the horizon, *The New England Journal of Medicine*, 314:53-55, 1986.
2. Mueller, C. Barber and Jeffries, Wendy: Cancer of the breast: its outcome as measured by the rate of dying and causes of death, *Annals of Surgery*, 182(3):334-341, 1975.
3. Petrakis, Nicholas L.: Genetic factors in the etiology of breast cancer, *Cancer*, 39:2709-2714, 1977.
4. Osborne, Michael P. and Crowe, Joseph P.: The identification of enhanced risk patients and their management in a special surveillance breast clinic, in *Breast Cancer Diagnosis and Treatment*, Irving M. Ariel and Joseph B. Cleary, Eds., New York, McGraw-Hill Book Co., 1987; p. 80.
5. Dupont, William D. and Page, David L.: Risk factors for breast cancer in women with proliferative breast disease, *The New England Journal of Medicine*, 312:146-151, 1985.
6. Cancer Committee of the College of American Pathologists: Is "fibrocystic" disease of the breast precancerous?, *Archives of Pathological Laboratory Medicine*, 110:171-174, 1985.
7. Ohuchi, Noriaki, Abe, Rikiya, and Kasai, Morio: Possible cancerous change of intraductal papillomas of the breast, *Cancer*, 54:605-611, 1984.
9. Rosen, Paul P., Braun, David W., and Kinne, David E.: The clinical significance of pre-invasive breast carcinoma, *Cancer*, 46:919-925, 1980.
10. Longacre, Teri A. and Bartow, Sue A.: A correlative study of human breast and endometrium in the menstrual cycle, *American Journal of Surgical Pathology*, 10(6):382-393, 1986.

WE'RE PLEASED TO ANNOUNCE WE'VE CORRECTED OUR IMAGE PROBLEM.

As a major component of Hinds General Hospital's 12,000 square-foot Imaging & Outpatient Center, our General Electric Signa Magnetic Resonance Imaging system represents our continuing commitment to offering the best available equipment and facilities for Hinds General physicians.

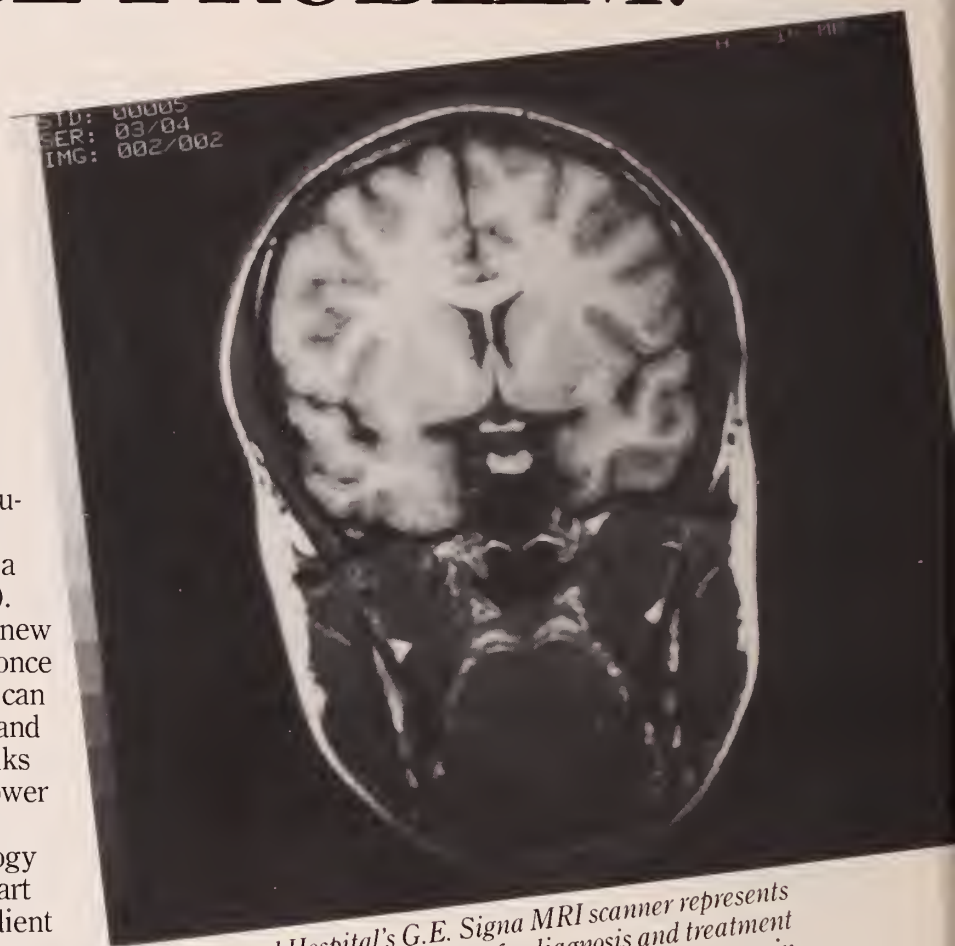
Shortly after installing our MRI scanner, a problem with fluctuating electrical power forced us to shut it down until we could install a UPS (uninterrupted power source).

Our recent investment in this new UPS unit has solved the problem once and for all. Consequently, we now can offer excellent quality MRI scans and reduced patient waiting time, thanks to our improved, pure electrical power supply.

And that's what the Technology of Caring is all about: state-of-the-art medicine and a very special ingredient called HindsCare.SM

Additional HGH MRI benefits include:

- Convenient FREE parking
- Same-day written results
- Copies of film upon request — NO CHARGE
- Out-of-town referrals welcomed



Hinds General Hospital's G.E. Signa MRI scanner represents the pinnacle of imaging capability for diagnosis and treatment of disease. It's one more example of our commitment to remain at the forefront of medical technology.

HINDS GENERAL

H O S P I T A L

The Technology Of Caring.SM

1850 Chadwick Drive/Jackson, MS 39204/601-376-1000

©1988 Hinds General Hospital. All rights reserved.

Professionalism Under Siege

W. LAMAR WEEMS, M.D.

Jackson, Mississippi

FIRST I WANT TO EXPRESS appreciation to Millsaps College and the Else School of Management and the Center for Professional Services for sponsoring this conference, and to the firm of Watkins, Ludlum and Stennis for providing support. The subject is certainly timely and important.

I am honored to have been asked to represent the medical profession on this program, but, at the same time, somewhat apologetic that I come so ill equipped to talk about business, which is the theme of the conference. As a physician and as an academician, I have spent most of my life learning, practicing and teaching the art and science of medicine. The business side of medical practice has always been anathema to me, an awkward necessity, which, although producing financial rewards, has often been in conflict with humanitarian instincts and somewhat demeaning to the service orientation of medical practice. The business of medicine is an arena in which I have felt ill prepared by training and by temperament to compete. Many physicians share this aversion of mine to business affairs and therein lies much of the explanation of our present predicament. Realistically, professionals, physicians in particular, must recognize that the system, the business of the profession, is the nurture of the art and science.

The title of this symposium is "The Professions: Businesses in Transition." For medicine, the transition amounts to a revolution. Like it or not, physicians as a group face the necessity of belatedly giving much more of their attention to the business of medicine. The alternative is to risk the continued

degradation of the profession to the status of a trade. There has been a great need for some time to incorporate better business practices in the profession of medicine. Now I see the development of an even greater need down the road to bring a higher order of professionalism to the business of medicine. That is why this symposium seems so germane to the time, and why its sponsorship by a liberal arts college with a long tradition of commitment to the study of the humanities is particularly appropriate.

In the context of this discussion, I would like to draw a distinction between professions and trades. Professions have dimensions which are not found consistently in most trades, among which are the following:

1. Body of skill and knowledge. This dimension is usually defined by academic curricula and is usually considered by society to be vital to the public interest.
2. Exclusivity. Access to the profession is limited by requirements for academic degrees, certification of competence, organizational membership, licensure and privileges in employment, i.e., hospital staff membership.
3. Ethical standards. Essentially all professions have codes of ethics which define the moral obligations of the professional to society in the practice of the profession.
4. Independence. Relationship of professionals to their clients are, for the most part, private and privileged. Professionals exercise their own judgment in providing professional services.
5. Accountability. Professionals are required to establish proof of competence and to provide evidence of continuing competence by credentialing bodies, by licensing boards, and by peers.

Professionalism, as defined, has value. To the public, it gives some assurance of the competence

President, Mississippi State Medical Association, 1987-88.
Presented January 8, 1988, at a seminar, "The Professions: Business in Transition," sponsored by Millsaps College, Else School of Management, and The Center for Professional Services.

and trustworthiness of professional practitioners. To the professional it provides credibility, prestige, and franchise, all of which have economic value. Ideally, then, recognition of a profession in custom and in law is a quid pro quo contract. Individual citizens, not knowing how to judge the competence of a professional, are spared the vagaries of an unregulated market for professional services. Professionals, in turn, accept responsibility, individually and as a group, to protect the public interest in exchange for economic and social perquisites.

"In the hands of the most responsible members of the medical community, the practice of medicine reached a peak of quality, cost-effectiveness and compassion which is unlikely to be found again when . . . the health care industry is ruled by corporate or governmental authority."

The profession of medicine has come close to the attainment of such an ideal social contract. After a long and arduous struggle against ignorance and chicanery, the profession, in the early part of this century, came to be highly respected by the public. That respect was subsequently translated into political power which Paul Starr characterized as professional sovereignty. As interpreted by Starr in his Pulitzer Prize winning book, *The Social Transformation of American Medicine*, the "rise of a sovereign profession" was the result of a well designed and vigorously waged campaign on the part of organized medicine, largely motivated by the quest for greater financial rewards. Success of this venture depended upon the acquiescence of the public. The public acquiesced largely because of great respect for the skill and knowledge of physicians, and because of trust in medical ethical standards. Cynics scoff at the notion that any group of professionals could handle such an open ended delegation of authority in a selfless manner. Many physicians did so, however, as autonomous individual professionals during the "good old days" of professional sovereignty. In the hands of the most responsible members of the medical community, the practice of medicine reached a peak of quality, cost-effectiveness and compassion which is unlikely to be found again when this revolution has run its course and the health care industry is ruled by corporate or governmental authority. Nevertheless, for better or for worse, the sovereignty of the medical profession is clearly slipping away. Public opinion polls show decline in public support of physicians. Public

policies increasingly infringe upon professional autonomy. The cottage industry of medical practice is being preempted by corporate enterprises. What has brought about this revolutionary change in a system which has long been recognized as the best in the world?

I ran across a cartoon which shows a group of corporate board men around the conference table and one is asking, "OK, now, what's the *downside* of going the greed route?" Without doubt, greed has surfaced in the health care system. Perhaps of more importance, the public perceives that health care professionals in general are excessively concerned with money. The downside of going the greed route, whether in reality or only in the public mind, for medicine has obviously been the erosion of public support. In fairness to the medical profession, however, public policy must share the blame along with individual avarice. Medical practitioners could hardly be expected to unanimously resist the temptation to profit in an environment which has presented such lucrative opportunities for exploitation. A few of the inducements to higher cost in the health care system have been:

1. Legal constraints on peer review. Antitrust restrictions and risk of liability suits have hampered the efforts of ethical physicians to influence wrongdoers or to impose sanctions.
2. Interposition of third party payors. Payment for services by intermediaries has depersonalized the financial transaction between doctor and patient. One of the most important differences between the business of the profession of medicine and the business of other professionals is the prevalence of payment for services by insurance.
3. Perverse incentives. Private insurance restrictions on payment for outpatient services have long encouraged the use of more expensive hospital facilities. The Hill-Burton program provided inducements to communities to expand hospital bed capacity beyond actual need which increased the pressure upon physicians to admit patients to the hospital. The Medicare program adopted "profile" reimbursement schedules for physicians and "cost plus" payment of hospital, both of which provided irresistible temptations to increase charges to patients.
4. Unrealistic expectations. People have been told by politicians that they "can have it all." The health care industry has glorified its capabilities to help people, creating great demand. Vast sums of money have been poured into the system in the attempt to fulfill public expectations.
5. Litigation. The cost of insurance and the cost

of "defensive medicine" have added to the expense of health care.

In sum, such factors have contributed to an environment which has rewarded greed and penalized conservative style of medical practice.

As Walter McClure, president of the Center for Policy Studies and an early advocate of alternative health care delivery systems, recently told the American College of Physician Executives, "power over the health care system is passing from physicians to purchasers." He might have added that the power of purchasers will not be mediated through individuals. Individuals will, in fact, continue to have their power to dictate the terms of their own health care eroded. Governmental agencies and corporations as mass purchasers will control the care of large groups of individuals. In the exercise of their power, such purchasers can be expected to assume many of the prerogatives previously reserved for professionals and for their patients.

Events in the health care industry seem to be unfolding in the following cascade: Cost is the major determinant of change. For instance a recent study by Health Care Financing Administration estimates that total health care expenditures in this country will rise from \$458 billion (10.9% of GNP) last year to \$1.5 trillion (15% of GNP) by the year 2000. Such figures cause alarm in business and governmental circles. In the effort to control costs, the health care system has been deliberately exposed to competition in the marketplace to an unprecedented degree. In the marketplace, the potential for profit in health care delivery has been eagerly embraced by entrepreneurs. Oddly, the need to contain costs because resources are being exhausted has evenuated in a scramble for profits because the system is so lucrative. In the chapter, "The Coming of the Corporation," Starr says, "of all the forces fragmenting the profession in the 1980's, none promises to introduce more antagonistic divisions than the growing presence of corporations in medical care." One example of corporate intrusion is the insurance industry. In a practical and substantive way, insurance companies are in the practice of medicine. For instance, insurance companies are currently qualifying health care providers, such as hospitals and participating physicians, setting fees, certifying hospital admissions, determining appropriate lengths of hospital stay, requiring second opinions prior to elective surgery, restricting medication, and rationing care.

This trend undoubtedly meets the approval of Joseph A. Califano, former secretary of Health, Education and Welfare and currently chairman of the

"Events in the health care industry seem to be unfolding in the following cascade: Cost is the major determinant of change."

Health Care Committee of the Chrysler Corporation. I listened to his keynote address to the American Hospital Association Leadership Forum in Toronto in August 1986 in which he said, "We need to loosen the hammerlock of doctors on the practice of medicine. The high priests of medicine have said too often that only they know how to provide care, who should receive it, who should provide it and how much they shall be paid." Maybe so, but where, one might ask, does he expect to find a higher wisdom to apply to decisions which are made at the bedside of sick people? Will such decisions, one by one, be better guided by instructions emanating from corporate board rooms and from the bowels of the federal bureaucracy than by the sense of duty and informed judgment of hundreds of thousands of individual professionals? The answer to that question has enormous social importance and should be a key consideration in the development of health care policies. An article in the *Journal of the American Medical Association*, December 11, 1987 characterized the change to corporate control as "The Deprofessionalization of Medicine." An editorial in the October 1987 *Massachusetts General Hospital News* calls it "The Road to Decline."

Still there are many, believing in the value of such intangibles as doctor-patient relationships, who hold that professionalism should transcend management in importance in the health care system. Management, they say, should be the servant of professional practice and not its master. In spite of the intensity of such feeling in support of this concept among physicians, professionalism is losing out. Professional sovereignty is getting to be an anachronism. Corporate medicine is rapidly becoming a dominant force.

Much of what I hear from physicians in response to the diminution of their influence are expressions of frustration and outrage and nostalgic proposals to return to what used to be. Unfortunately, such physicians, unaware of the futility of clinging to the past, are not very helpful in adapting to the future. New realities, unpleasant as they might appear, must be addressed. One major new reality is the dominating presence of corporate medicine which overshadows the individual physician and preordains the demise of the cottage industry of medical practice.

If the picture, as painted, of the medical scene is

reality and if professionalism has value, then what is the appropriate professional response? Another paradox seems to arise. Physicians must accept subordination in order to regain power. First they must become more subordinate to their ethical commitments — to the interests of their patients. In the words of the pledge of a medieval order of knights, “to serve our masters, the sick.” In the words of AMA President William S. Hotchkiss, “Yes, there are different methods of delivery of care and there are more regulations. But there is always the opportunity to serve our patients.” Secondly, physicians as individuals must accept subordination to the professional group. It was group action which brought power to the profession in the first place and it will require group action to get it back. However, traditional political action can be expected to have limited effectiveness in the near term because lawmakers and the public perceive physicians to be self serving in their political goals. Political activity should be sustained for what it is worth, but the most important power struggle at the moment is occurring in the marketplace, the result of designation by government and of instigation by business and industry. Of course, the marketplace is oblivious of professionalism, except as a marketing gimmick, and is largely unconcerned about such things as the care of the uninsured poor, education, and research. Physicians as a group are unaccustomed to competing in this arena. They don’t, however, now have much choice if their wish is to regain influence in the health care system. True to capitalistic tradition, the choice for those who would exercise power in the health care industry is to own the business or to unionize.

“In a hostile and cynical world, treasures must be protected. Professionalism is a treasure which has great value to the various professions and to the public.”

The profession of medicine confronts serious problems in the effort to unionize. Aside from the fact that union activity is likely to be distasteful and demeaning, some practical obstacles exist. In the opinion of AMA attorneys, only a small number of physicians can get the essential legal protection that a bona fide union affords its members: protection from antitrust laws. Only physicians who are employed in traditional employer-employee relationship can get those protections. The glut of physician manpower stands to weaken the will of physicians to present a united front, which unionism requires

in order to be effective. Physicians are dependent upon licensure for the right to practice. The threat to withdraw licensure was instrumental in breaking a recent strike by physicians in Canada. Physicians are limited by ethical constraints in the use of strikes, which are the ultimate weapon of unionism. The Ethics Manual of the American College of Physicians, for example, states, “The withholding of medical services by physicians is a most serious action, cannot be condoned, and is unethical.” Nevertheless, writing in the *New England Journal of Medicine*, Dr. Sanford Marcus, president of the Union of American Physicians and Dentists declares, “We become more convinced with each passing day that only by standing together as a determined and ethical trade union of doctors can we protect and preserve at least the best features of that legacy of ‘professionalism’ of which we are so properly proud and which seems to be slipping away from us.” A resolution calling upon the AMA to begin to develop “unionoid” capabilities was defeated in the House of Delegates in December 1987, but it was generally conceded that the issue isn’t dead.

Ownership in the health care system is fraught with about as many problems for physicians as is unionism. For instance, conflicts of interest may occur between the physician owner and the patient, who might also be a customer. In many settings, ownership compromises the ability of the physician to act as the patient’s advocate. Physicians are often-times handicapped in the operation of a business because they generally lack management expertise. Within the medical profession, competitive forces, especially those which exist across specialty lines, make it difficult for physicians to join together in the exercise of ownership. The AMA statement on the subject of physician ownership is: “A physician may own or have financial interest in a for-profit hospital, etc. However, the physician has an ethical obligation to disclose his ownership to his patient. Under no circumstance may the physician place his own financial interests above the welfare of his patient.”

Nevertheless, in a capitalistic system there is simply no substitute for ownership as a source of power. The concept of corporate ownership by members of a profession as a power base for professional influence is, to my knowledge, relatively new and untried. Physicians in Mississippi chartered the Medical Assurance Company of Mississippi ten years ago and capitalized the company with the purchase of stock. Currently, the company provides medical liability insurance for over half of the physicians in

the State. The Mississippi Foundation for Medical Care is a physician-owned company which has the Medicare contract (PRO), a Medicaid contract, and several contracts with private industry to perform utilization review and quality assurance. You heard on this program from Mr. Lynn Ross, Director of Mississippi Physicians Health Plan, about the efforts to establish a physician owned prepaid health plan. I wish I could foresee where this program of ownership under the aegis of the Mississippi State Medical Association is leading us. I don't know. Despite the risks, in the present environment it seems

to be a strategy that should be tried, since other alternatives, including traditional professional authoritarianism and political action are failing to sustain professional sovereignty.

In a hostile and cynical world, treasures must be protected. Professionalism is a treasure which has great value to the various professions and to the public. Professionals of all disciplines should be jealous of their prerogatives, attentive to their obligations and vigilant in maintaining the power required to protect their inheritance. Attention to business is usually required. ★★★

PHYSICIANS, THERE ARE TWO KINDS OF FLEXIBILITY IN THE ARMY RESERVE WE THINK YOU'LL LIKE.

One, time. We know how tough it is for a busy physician to make weekend time commitments. So we offer flexible training programs that allow a physician to share some time with his or her country. We arrange a schedule to suit your requirements.

Two, the opportunity to explore other phases of medicine, to add a different kind of knowledge—the challenge of military health care. It's a flexibility which could prove to be both stimulating and rewarding, with the opportunity to participate in a variety of programs that can put you in contact with medical leaders from all over the country.

See how flexible we can be, call our Army Medical Personnel Counselor:

**MAJ MEL VAN DYKE
(504) 522-1977/1978**

**BE ALL YOU CAN BE.
ARMY RESERVE.**



The President Speaking

In Conclusion

W. LAMAR WEEMS, M.D.
Jackson, Mississippi

*For of all sad words of tongue or pen,
The saddest are these: "It might have been!"*
—John Greenleaf Whittier

Lately, it seems that time is passing at an accelerating rate, a sign, I guess, of advancing age. Suddenly, Annual Session 1988 is upon us and, with it, the end of my term as President of the Mississippi State Medical Association. It has surely been an exciting and eventful year. I wish it had been more successful. To characterize the experience succinctly, the words "close but not quite" come first to mind. In looking for consolation, as losers always do, I think your leadership can rightly claim some progress toward the goals which we set back in June, 1987, even though the outright attainment of most major objectives has been elusive.

The failure to achieve tort reform was a singular disappointment this year because our hopes were high and the need so great. We discovered to our chagrin, in the showdown, that a virtuous cause, a strong coalition, a meritorious legislative package, and a strenuous political effort were not quite enough to break the current stranglehold which the Trial Lawyers have on the House of Representatives. And yet, additional momentum has been generated by the struggle. Even the Trial Lawyers are being forced to admit that a problem exists, although they continue to be artful dodgers when it comes to affixing blame and in identifying solutions.

Deficiencies in health care programs for the uninsured poor were not effectively addressed this year as many of us had hoped. The new governor and his staff have been preoccupied with other agenda items during the 1988 legislative session and too many legislators are still unable to understand the magic of the Federal match in the Medicaid program. Behind the scenes, however, the stage has been set for changes in 1989 when health care issues are likely to be given more visibility.

For me, the biggest disappointment of the year has been the failure of Mississippi Physicians Health Plan to progress as predicted. Unlike tort reform, indigent care, chiropractor bills, etc., which are perennial issues, this attempt to establish a physician-owned health insurance company is unique. Never again will the

(Continued on page 147)

**Patients and Doctors,
Commerce and Caring**

Do you get the feeling that the sense of professionalism in our calling is being gradually eroded and will, I fear, finally go the way of the dinosaur or the Dodo bird?

Not only are we an occupation requiring advanced training in a science, but we also have professed, declared and avowed when we took the oath to care for our fellow beings, and I don't just mean smear inunctions on their buttocks or squirt 606 in their luetic veins, but to be concerned about *them* as well as their pathology, and provide them with the knowledge that we realize our responsibility for their well-being. God forbid that they get the feeling that they (or their illnesses) are an item of commerce, and our services are pieces of goods that make cash registers ring, wallets fatten, and portfolios lengthen in the unfeeling air of the marketplace.

Medical Assurance Company of Mississippi needs some medical assurance that risk management can be effective, and one of the cornerstones is a true, caring, feeling patient-doctor relationship.

ARTHUR A. DERRICK, JR., M.D.
Associate Editor

PRESIDENT'S PAGE

(Continued from page 146)

window of such opportunity exist in the marketplace and, likewise, the willingness of members of MSMA to provide the necessary capital is unlikely to recur. Rumors that the company is foundering are not entirely true; although, it has been necessary to terminate the management contract with Physicians Health Management Company of Ohio in order to reduce expenses and to preserve capital. At the time the abortion of the joint effort occurred, success was tantalizingly close. The essential ingredients were in place: management capability, insurance product, and staffing. In fact, the employees of three companies were insured and the operation was functioning well for all concerned. However, an impasse was finally reached with reluctant physicians on one side, unwilling to make a commitment until the company demonstrated success, and the businessmen on the other, who, while planning to incorporate managed health care into their employee benefit package sometime soon, were, nevertheless, skeptical of our own program because of lukewarm physician support and skimpy capital. Meanwhile the meter was running on expenses. Perhaps we can take some comfort from the fact that the prospect of a statewide, physician-owned prepaid health care

Patient Information Brochures/Services Available from MSMA

- "CommuniCare" Brochures
- Health Care Cost Brochures
- Patient Survey Forms
- "Changes in Health Care: What Your Family Should Know"
- AIDS Speakers Bureau

program has temporarily kept some other companies out of the market. However, this small gain will surely be evanescent. The potential value of ownership of a competitive health insurance company by the mainstream of ethical physicians in Mississippi transcends by quantum measure any picayunish concerns about protection of the status quo, the cost of the stock investment, fee schedules, case management or any other management details. Failure to transmit the concept of the importance of the company per se to rank and file members during this critical time represents a serious failure of leadership in my estimation.

To be sure, there have been many achievements this year and, even in defeat, much has been learned which will undoubtedly translate into future success. One lesson we have learned the hard way is that organized medicine is entering a highly competitive and treacherous environment. MSMA was

not originally geared for such an environment, and structural weaknesses are already beginning to show in the organization under stressful conditions. At the outset, last June, Joe Burnett, Immediate Past President, accepted the task of identifying consulting firms which might be considered to help MSMA develop a plan to reorganize. Finally, after much discussion, the firm of Coopers and Lybrand was employed by MSMA Board of Trustees, with concurrence of the boards of MACM and MFMC, to conduct a strategic planning project. The House of Delegates will receive details of this project at the Annual Session. All members will be urged to cooperate in this vital undertaking during the next few months.

For better or for worse, this past year, as they say, is history. Nanette and I have enjoyed it. Our respect for the Association, for the membership and for the profession of medicine has been deepened by the experience. A few opportunities have been missed and that is a pity. But the future holds many challenges which should now preoccupy our attention.

By The Year 2000 There Will Be 185,000 More Doctors Than Needed

Will Your Practice Be Able to Successfully Compete?

How can you increase your patient base? Should you be getting more support from your hospital? What should you do if you are losing patient's to HMO's?

The Bryton Group, an established leader in health care marketing, has already presented the answers to these questions and more to over 35,000 health care professionals.

For more information contact:



P.O. Box 9164
Metairie, LA 70055
(504) 833-1313



Dealing With The Realities of the 90's

Date: June 11, 1988

Place: The Fairmont Hotel,
New Orleans, LA

Registration Fee: \$135 (\$100 for
additional members
of the same practice)

Special rates are available at the Fairmont for participants.

LETTERS

TO THE EDITORS:

Having been a member of the State Medical Association and a reader of the *Journal* since 1966, I have disagreed with some of the opinions of editorials and other articles on several occasions, but I have always felt that they were in good conscience promoted or written, feeling that it was to the good of the medical profession in Mississippi. However, in your March 1988 issue, under the article, "The President Speaking," for the first time I came upon a course which was recommended by its writer, Dr. Lamar Weems, that I felt was to the detriment of medicine in Mississippi and the United States as a whole. He was writing on the subject of nursing and how they could update their profession and recommended that they should "have the gumption to take advantage of collective bargaining." He goes on to say, "With the present shortages of nurses, there now exists an unusual opportunity to upgrade the profession in all parameters, including pay scales, competence, and morale, through enlightened union activity."

In my opinion this would mean the death of many hospitals in Mississippi and many more hospitals over the United States as a whole. With the hospitals now functioning under DRG and other governmental controls, a strong union and the nurses of these hospitals demanding more and more each year will soon lead to the demise of many small hospitals. I can not understand how with the present union situation in the United States being weaker than it has been in 20 years, any supposedly rational mind in good conscience could recommend such a thing to a group of people such as the nurses of Mississippi.

I consider Dr. Weems a friend and have always considered him such and hope to be able to consider him such in the future, but I violently disagree with his opinion on this topic. Furthermore I think that if Dr. Weems does in fact believe in unionization of the nurses of Mississippi that he should express this opinion as a personal opinion and not one as president of the State Medical Association. I do not believe that the doctors of Mississippi will support him in his view and feel sure that the Mississippi Hospital Association would be even more violently opposed to it. The Mississippi State Medical Association, the Mississippi Hospital Association, and the Mississippi Association of Nurses should all work together and present as combined a front as

possible in these changing times. I do not believe that the best interest, either singularly or collectively, of any of the three is best served by this approach.

FRANK H. TUCKER, JR., M.D.
Meridian, MS

IN REPLY:

I received a copy of your response to my message on nursing. I wish more of our members would read what goes into their *Journal* and provide feedback as you have done. My main purpose in writing this year on controversial issues has not been so much to sell my own views as it has been to provoke people to think and to react.

I hope to hear representative opinions on the question of how to improve the nursing manpower situation. Clearly nursing careers must be made more attractive since we can't conscript bright young people and force them to serve in this capacity. Nursing, like medicine, must seek ways to strengthen its power base if its members hope to improve their professional standing. I didn't advocate unionism as you erroneously stated in your letter, but collective bargaining is certainly one potential source of power which nurses have not fully exploited. There may be other options which would be less disruptive and more effective. The fact remains that we do have a nursing shortage. If you have any constructive ideas, I would like to hear them.

Again, thanks for taking the time to write.

W. LAMAR WEEMS, M.D.

New this year . . .

One more reason to join the AMA

Special benefit packages available with 1988 membership

A diverse membership has diverse needs, and the AMA is committed to addressing those needs. This year we're introducing something new when you join the AMA or renew your membership. In your AMA Membership Kit you'll have the opportunity to sign up for one of three benefit packages of publications, conferences, participatory panels, focused issue updates, etc., on topics related to the area you designate. Each package is tailored to address your particular interests:

- *Medical and scientific information and education* designed to enhance your practice, profession, and the public health.
- *Representation concentrated specifically on economic concerns*, such as professional liability and third party reimbursement.
- *Representation on a broad range of issues*, including not only economic concerns, but also quality of care, ethical issues, public health, and scientific issues.

To receive your full range of benefits, select one and only one of these free packages by filling out the business reply card in your AMA Membership Kit.

Please look for the card in your AMA Membership Kit and return it promptly. Your new benefit package is one more way the AMA supports you as a physician.



James H. Sammons, MD
Executive Vice President

American Medical Association 535 North Dearborn Street, Chicago, Illinois 60610

Now Available

The Health Policy Agenda for the American People

A Comprehensive Framework for the Future

After five years of collaborative effort, The Health Policy Agenda for the American People (HPA) has issued its Summary and Final Reports recommending policy guidelines for the future of our health care system. This landmark effort establishes a comprehensive, long-term framework for U.S. health policy into the 21st century.

Broad Reaching Recommendations

The HPA Reports contain guiding principles and specific policy recommendations covering a wide subject area:

- supplying, distributing and educating health professionals
- providing technology and facilities
- organizing resources
- communicating health information
- ensuring quality
- paying for services
- preparing for the future through research

A Health Policy Partnership

Representatives of the health professions, insurers, health care institutions, consumer organizations, business groups and the government collaborated to develop recommendations that reflect this broad array of viewpoints. Learn what the HPA has recommended on your behalf...and how it will affect your future.

Order Now

To order your copies of the HPA Summary and Final Reports **call toll-free 1-800-621-8335. In Illinois call collect 312/645-4987.** Or complete and mail the form below with your payment to:
The Health Policy Agenda for the American People
P.O. Box 10946
Chicago, Illinois 60610-0946
Order No. OP-207

Order Form

Please send me _____ copies of the HPA Summary and Final Reports (OP-207) at \$35 for the two volume set.

Subtotal _____
Sales tax (IL, NY residents) _____
Total _____

Name

Address

City

State / Zip

Please charge my: ☐ VISA ☐ MASTERCARD

Credit Card Number

Expiration Date

Signature

Phone

Payment must accompany order. Please allow 4-6 weeks for delivery.
For information on bulk purchases, please call 312/280-7168.

120th Annual Session

Mississippi State Medical Association

June 15-19, 1988

Biloxi

On June 15, 1988, the 120th Annual Session of the Mississippi State Medical Association will get underway. The combination scientific/business meeting will be held at the Royal d'Iberville Hotel in Biloxi. Reservations should be made with the hotel by completing reservation cards mailed to MSMA members this month, or by calling 388-6610.

House of Delegates

Sessions of the House of Delegates are scheduled for Thursday, June 16 and Sunday, June 19. Both meetings will begin at 9:00 a.m. Dr. William S. Hotchkiss, president of the American Medical Association, will address the opening session. Delegates will also hear an address by Dr. W. Lamar Weems, MSMA president. The inauguration of Dr. David Steckler of Natchez as 1988-89 president will take place at the concluding session.

Delegates will cast ballots for more than 50 nominees who have been selected by the Nominating Committee to fill vacancies in association offices. A list of candidates was mailed to all members 60 days prior to the elections, in accordance with the association's bylaws.

Concurrent Meetings

Among the many medical related groups which have scheduled meetings in conjunction with the annual session are the Mississippi Foundation for Medical Care and Medical Assurance Company of Mississippi. Completing the list of concurrent meetings are the annual session of the MSMA Auxiliary, meetings of more than a dozen specialty societies, and receptions hosted by three medical alumni organizations — Millsaps, Tulane and Ole Miss.

Scientific Assembly

Continuing medical education credit will be awarded for the scientific assembly, which will be held Friday, June 17. The Surgery Plenary Session will be conducted that morning as a joint session with the American College of Surgeons. The Medicine Plenary Session, a "Symposium on Contemporary Geriatrics," will be held that afternoon.

Highlighting the scientific presentations will be Dr. Richard J. Ham, the first to hold the State University of New York (SUNY) Distinguished Chair in Geriatric Medicine, who will present the 1988 James Grant Thompson Memorial Lecture. Dr. Ham's topic is "Geriatrics: Into the 21st Century."

Special Events

Members and guests will have the opportunity to greet association officers and Dr. Hotchkiss at the President's Reception on Wednesday evening, which is the first official function of the five-day session. The annual MSMA/MSMA Auxiliary banquet on Friday evening features Mark Shields, nationally syndicated columnist and television political commentator.

Tennis, golf and deep-sea fishing tournaments are on the calendar of special events again this year. Members are urged to sign up now for these popular activities.

OFFICIAL CALL

To all members of the Mississippi
State Medical Association

The 120th Annual Session of the Mississippi State Medical Association is called to meet at Biloxi, Mississippi, on Wednesday, June 15, 1988, pursuant to Article V of the Constitution. The House of Delegates will be convened at the Royal d'Iberville Hotel at 9:00 a.m. on June 16.

The Scientific Assembly will meet June 17. No member or guest will be permitted to participate in any aspect of the annual session until regularly registered.

W. LAMAR WEEMS, M.D.
President

DON Q. MITCHELL, M.D.
Secretary-Treasurer

SCIENTIFIC PROGRAM

120th Annual Session

June 17, 1988

SURGERY PLENARY SESSION

(Participants: MSMA and American College of Surgeons, Miss. Chapter)

- 8.00 a.m. *"Cardiac Risk Assessment in Peripheral Vascular Surgery"*
Robert S. Rhodes, M.D., Jackson, MS
- "A Rational Approach to the Treatment of Thyroid Cancer"*
Norman C. Nelson, M.D., Jackson, MS
- "AIDS and HIV in Mississippi and the U.S."*
Ed Thompson, M.D., Jackson, MS
- "Autotransfusion: Postoperative Use"*
David B. Stephens, M.D., Hattiesburg, MS
- "Interpretation of the Pap Smear"*
Ramon P. McGehee, M.D., Jackson, MS
- "Federal Medical Regulations: A Cannon Out of Control"*
Richard Field, Jr., M.D., Centreville, MS
- 12:00 noon ACS Luncheon/Business Meeting/Scientific Program
- "Compartment Syndrome"*
Robert S. Rhodes, M.D., Jackson, MS
- "Rigid Internal Fixation vs. Traction and Casting in the Treatment of Adolescent Femoral Shaft Fractures"*
Brad Reeves, M.D., Jackson, MS
-

MEDICINE PLENARY SESSION — "Symposium on Contemporary Geriatrics"

- 1:00 p.m. *James Grant Thompson Memorial Lecture —*
 "Geriatrics: Into the 21st Century"
 Richard J. Ham, M.D., Syracuse, NY
- "Health Care and the Elderly in Nursing Homes: Quality Care and Standards"*
 Mendal G. Kemp, Jackson, MS
- "Cognitive Impairment in the Elderly: Management and Family Issues"*
 Roger J. Cadieux, M.D., Harrisburg, PA
- "Skin Tumors in the Elderly"*
 Ralph C. Daniel, III, M.D., Jackson, MS
- "Management of Incontinence in the Elderly"*
 G. Rodney Meeks, M.D., Jackson, MS

MEDICAL ORGANIZATION

MSMA Membership Banquet Features Mark Shields



Mark Shields, one of the nation's most humorous columnists, will be featured speaker at the annual MSMA/MSMA Auxiliary Membership Banquet on Friday, June 17 in Biloxi.

Shields has mastered the art of story-telling, and his presentations have been described as a unique blend of information, analysis, and humor.

Behind his display of wit and wisdom is the experience of 20 years in political affairs. In addition to his nationally syndicated column, Shields frequently appears on television as a political commentator. He is the author of *Mark Shields on the Campaign Trail*, an amusing and informative book about the 1984 presidential campaign.

MSMA Auxiliary Announces 65th Annual Session Plans

Some of the flavor and flair of historic Natchez will be in evidence at Biloxi's Royal d'Iberville Hotel next month, when the 65th Annual Session of the Mississippi State Medical Association Auxiliary gets underway.

Mrs. Joe (Peggie) Herrington of Natchez, 1987-88 MSMAA president, said that convention plans include a "Lee Barnes Cooking Class" on Thursday, June 16. Lee, the daughter of Doctors Robert and Bettina Barnes of Natchez, is the former owner of Lee Barnes Cooking School in New Orleans. She will demonstrate cooking techniques and preparation of Creole classics. Auxiliary members and spouses are invited to participate in this entertaining and informative afternoon workshop.

A special feature of the annual MSMAA luncheon will be "Fashions by Silver Street Ltd." Informal modeling will be presented by this Natchez specialty shop, owned by auxiliary Lu Barraza. Silver Street Ltd. is located in a former "bawdy house"

in colorful Natchez-Under-the-Hill, an area once inhabited by boatmen, trappers, prostitutes, and gamblers.

The MSMAA will again conduct a silent auction to benefit AMA-ERF during the annual session. As in past years, a number of attractive items have been donated for the fund-raiser, always a successful and popular event. The auction will be held during the reception preceding the MSMA/MSMAA banquet, Friday, June 17. The reception begins at 7:00 p.m. and features noted columnist/commentator Mark Shields as guest speaker.

Arrangements have also been made to repeat the Auxiliary's Hospitality Center, which has become a popular gathering place for annual session participants each year. MSMA and MSMA Auxiliary members are invited to stop by often at the Hospitality Center, to enjoy coffee, soft drinks and homemade treats, and to visit with friends and colleagues from across the state.

Rounding out the list of MSMAA activities during the five-day Annual Session are: the annual meeting of MSMAA delegates, the installation of new officers, and the annual Past Presidents' Breakfast.

Coordinating plans for the MSMAA Annual Session with Mrs. Herrington are Convention Committee members Mrs. Louis (Fay) Lehman, chairman; Mrs. Carl (Marcia) Passman; and Mrs. D. F. (Lu) Barraza, all of Natchez. Mrs. Ben (Kathy) Carmichael of Hattiesburg is AMA-ERF Silent Auction Chairman.

Auxiliary officers for 1987-88 include, in addition to Mrs. Herrington: Mrs. Doyle (Ruth) Smith of Hattiesburg, president-elect; Mrs. George (Ginny) Abraham of Vicksburg, first vice president; Mrs. Ben (Kathy) Carmichael of Hattiesburg, second vice president; Mrs. Kenneth (Susan) Hines of Greenwood, third vice president; Mrs. Eric (Nancy) Lindstrom of Laurel, fourth vice president; Mrs. Roy (Lynn) Duncan of Pascagoula, recording secretary; and Mrs. Billy (Sylvia) Walker of Jackson, treasurer. Mrs. James (Jo) Waites of Laurel is parliamentarian and immediate past president.

HMSS and YPS Sections To Meet in Biloxi

The annual meetings of MSMA's Hospital Medical Staff Section and Young Physicians Section will be held Saturday morning, June 18, in Biloxi. This is the first time the two meetings have been scheduled on the same day of the Annual Session. The

(Continued on page 154)

120th Annual Session

June 15-19

Summary of Activities

Wednesday, June 15

President's Reception

Thursday, June 16

Reference Committee Breakfast

Medical Assurance Co.

House of Delegates

Miss. Foundation for Medical Care

Reference Committee Hearings

American Medical Society on Alcohol and

Other Drug Dependencies

Medical Alumni Reunions

Friday, June 17

MSMA Past President's Breakfast

Surgery Plenary Session

Medicine Plenary Session

Fifty Year Club

Miss. Ob-Gyn Society

Miss. Psychiatric Association

American College of Emergency Physi-
cians, Miss. Chapter

American College of Surgeons, Miss.
Chapter

Miss. Neurology Society

Miss. Academy of Family Physicians

Miss. EENT Association

American Society of Internal Medicine

Saturday, June 18

Young Physicians Section

Hospital Medical Staff Section

Miss. Anesthesiology Society

Miss. Pathology Society

Miss. Urological Society

Miss. Dermatology Society

Sunday, June 19

Continental Breakfast

Church Services

House of Delegates

James Grant Thompson Memorial Lecture

Friday, June 17

1:00 p.m.

"Geriatrics: Into the 21st Century"

Richard J. Ham, M.D., Distinguished Chair
in Geriatric Medicine, State University of New
York, Syracuse, NY.

Tennis, Golf, Fishing Events On Annual Session Calendar

Registration is underway for MSMA's tennis tournament, golf tournament, and deep sea fishing rodeo. All three events are on the schedule of activities for the 120th Annual Session in Biloxi.

Gulfport Racquet Club is the site for the tennis tournament, scheduled to begin at 1:00 p.m. on Saturday, June 18. The tournament is sponsored by Medical Assurance Company, which will provide tennis balls and refreshments. Trophies will be awarded in men's and women's doubles competition.

Golfers will prepare to tee off at 1:30 p.m., Saturday, June 18, at St. Andrew's Golf Course. Trophies will be presented for low gross, low net, longest drive, and closest to pin. Early registration is recommended for this popular event.

Charter boats for deep sea fishing will depart from the Broadwater Marina at 7:00 a.m., Friday and Saturday, returning at 3:30 p.m. Registration fees will cover boat rental for the day, soft drinks and sandwiches. Prizes will be awarded for largest catch in Spanish mackerel, bonito and jackfish.

HMSS and YPS in Biloxi

(Continued from page 153)

decision to schedule the meetings in tandem was made last fall by the Council on Scientific Assembly, which is charged with planning the annual session.

The YPS meeting, under the direction of Dr. George E. McGee, chairman, will begin at 8:00 a.m. The program includes a business meeting and an update on state and national legislation affecting the profession of medicine.

"Decision Making in the Year 2000: The Impact of Technology" is the topic of an address by Phil Manning, M.D., who will speak at the HMSS meeting, set to begin at 10:00 a.m. The program, planned with the assistance of the Mississippi Health Sciences Information Network Steering Committee, will include a presentation on state and national proposals for improved access to health sciences information, including demonstrations of computerized information sources. The meeting also is designed to provide a forum for assessing the unique information needs of health professionals in Mississippi. Dr. Bill Gates is chairman of the MSMA Hospital Medical Staff Section.

Mississippi State Medical Association Auxiliary

Convention 1988

Wednesday, June 15

12:00 noon Registration/Hospitality
5:30 p.m. MSMA President's Reception

Thursday, June 16

8:00 a.m. Registration
9:00 Hospitality Center
9:00 MSMA House of Delegates
12:00 noon Preconvention Board Meeting & Luncheon
2:30 p.m. Workshop (cooking class)
6:30 Millsaps Alumni
7:00 Ole Miss Alumni
 Tulane Alumni

Friday, June 17

8:00 a.m. Registration
9:00 Hospitality Center
9:00 General Session
12:00 noon Luncheon
3:30 p.m. Postconvention Board Meeting
6:30 MSMA/MSMA Auxiliary
 Reception/Banquet
 Silent Auction

Saturday, June 18

8:00 a.m. Past President's Breakfast

Sunday, June 19

8:00 a.m. Continental Breakfast
 Church Services
9:00 MSMA House of Delegates



PERSONALS

BLAIR BATSON of UMC was examiner for the American Board of Pediatrics in Houston, Texas.

RALPH L. BROCK of McComb served as king of the McComb Junior Auxiliary's 1988 Azalea Ball.

DAVID BRUCE of UMC was visiting professor at the University of South Alabama in Mobile in March.

EDWARD L. CARRUTH of Meridian announces the association of JACOB E. ULMER, III, for the practice of family medicine.

WILLIAM CAUSEY of Jackson spoke on AIDS at a public education forum at Carthage United Methodist Church and at a seminar in Greenwood sponsored by the State Department of Education and the Mississippi School Food Service Association.

CHARLES CESARE of Clarksdale was speaker at a Women's Health Symposium at Northwest Mississippi Regional Medical Center.

JOHN DEGROOTE of Pascagoula spoke on AIDS at a forum co-sponsored by the Pascagoula Public Library and Singing River Medical Society.

ELBERT A. DUNCAN has associated with Radiology of Tupelo, 913 Garfield Street, for the practice of radiation oncology.

WILLIAM R. FELLOWS of Biloxi has been certified by the American Medical Society on Alcoholism and Other Drug Dependencies.

ALAN FREELAND of UMC was guest lecturer at a meeting in Indianapolis of the Hand Surgery Association of Indiana.

STUART GUTTMAN of Pascagoula has been elected medical director of the Southeastern Region of the Mississippi Society for Respiratory Care.

JOHN HEY of Greenwood recently spoke at a public forum on arthritis.

RICHARD JOHNSON of Hattiesburg has completed a course in prostate ultrasound sponsored by the Southern Foundation for Education and Medical Research in Atlanta.

HERBERT LANGFORD of UMC made a presentation at the Council on Epidemiology Conference of the American Heart Association in Santa Fe, New Mexico, and also gave grand rounds at Henry Ford Hospital in Detroit, Michigan.

WILLIAM A. LONG of Jackson was speaker at a parents' meeting at Grace Presbyterian Church in Starkville.

The Mississippi State University named its student health center for JOHN C. LONGEST, who is retiring after 40 years as the director. Ceremonies held April 15 included formal dedication of the facility and a reception.

FRANK MARASCALCO of Clarksdale was speaker at a Women's Health Symposium held at Northwest Mississippi Medical Center.

DUDLEY H. MUTZIGER of Natchez announces his retirement from the practice of family medicine.

JOHN M. MCRAE of Jackson has been certified by the American Medical Society on Alcoholism and Other Drug Dependencies.

ED MILLER of West Point spoke on heart disease at a recent meeting of the local Rotary Club.

HOWARD NICHOLS of UMC was examiner for the American Board of Pediatrics in Houston, Texas, in March.

SESHADRI RAJU of UMC spoke at a meeting of the Association of Surgeons of India in Madras, India.

PRINTING — OFFICE SUPPLIES

EQUIPMENT — FURNITURE



Premier Printing Company

2485 West Capitol

Jackson, Mississippi

Phone 352-4091

RANDOLPH ROSS of Hattiesburg recently completed a course in prostate ultrasound sponsored by the Southern Foundation for Education and Medical Research in Atlanta.

GUS A. RUSH, III of Meridian was inducted as a fellow of the American Academy of Orthopaedic Surgeons during ceremonies at the association's 55th annual meeting in Atlanta.

ROBERT J. SCHMIDT of Biloxi has been certified by the American Medical Society on Alcoholism and Other Drug Dependencies.

SPENCER SCHRIETER of Tupelo made a presentation on "Disseminated Intravascular Coagulation" at the Mississippi Nurses' Association district meeting at North Mississippi Medical Center.

HILDON H. SESSUMS of Vicksburg spoke on "Antibiotics: Their Uses, Abuses and Limitations" at a seminar sponsored by the Family Medicine Clinic at Vicksburg.

SUTHIN SONGCHAROEN of Jackson spoke on osteoporosis at a seminar at First United Methodist Church at Yazoo City.

DWALIA SOUTH of Ripley was elected to the post of Medical Examiner for Tippah County for the 1988-92 term.

EARL STUBBLEFIELD of Jackson has been elected chief of the medical staff at Woman's Hospital. Other officers are MERCER LEE, III, vice chief, and CHARLES LEE, secretary-treasurer.

TATE THIGPEN of UMC spoke on current concepts and treatment of cancer at a meeting of the Picayune Chapter, Daughters of the American Revolution.

WILLARD L. WALDRON of Jackson recently was honored in an editorial tribute in the Mississippi Psychiatric Association newsletter for his contribution to the profession of psychiatry in Mississippi.

"A Sign of the Times!"



SALES — SERVICE — LEASING

HARRELD CHEVY-OLDS

354-2233

NEW MEMBERS

ALBERT, MICHAEL H., Jackson. Born Kenosha, WI, Jan. 25, 1957; M.D., University of Mississippi School of Medicine, Jackson, 1984; interned and family practice residency, University Medical Center, Jackson, 1984-1987; elected by Central Medical Society.

ANDERSON, DONNA M., Jackson. Born St. Paul, MN, March 13, 1953; M.D., George Washington University School of Medicine, Washington, DC, 1982; interned one year, University of Iowa, Iowa City; elected by Central Medical Society.

AVARA, W. TRAVIS, III, Moss Point. Born Pascagoula, June 10, 1956; M.D., University of Mississippi School of Medicine, Jackson, 1982; interned and general surgery residency, University Hospital, Jacksonville, FL, 1982-87; elected by Singing River Medical Society.

BAGNATO, V. JOHN, Hattiesburg. Born New York, NY, Feb. 2, 1954; M.D., University of Mississippi School of Medicine, Jackson, 1982; interned and general surgery residency, University Medical Center, Jackson, 1982-87; elected by South Mississippi Medical Society.

BUTLER, JOEL A., Eupora. Born Eupora, MS, Feb. 11, 1954; M.D., University of Mississippi School of Medicine, Jackson, 1985; interned one year, University Medical Center, Jackson; elected by North Central Medical Society.

CAPPLEMAN, TROY R., Ripley. Born New Albany, MS, July 10, 1956; M.D., University of Mississippi School of Medicine, Jackson, 1982; interned and family practice residency Jackson-Madison County General Hospital, Jackson, TN, 1982-85; elected by North Mississippi Medical Society.

CURE, JAMES D., Columbus. Born Albuquerque, NM, Feb. 13, 1956; M.D., Medical College of Virginia Commonwealth University School of Medicine, Richmond, 1982; interned and medicine residency, University of Virginia Affiliated Hospital, Roanoke, 1982-85; elected by Prairie Medical Society.

DELASHMET, GORDON B., JR., Jackson. Born Clarksdale, Dec. 12, 1955; M.D., University of Mississippi School of Medicine, Jackson, 1983; interned and medicine residency, University Medical Center, Jackson, 1983-86; elected by Central Medical Society.

DROFFNER, MARK C., Liberty. Born Camden, NJ, Oct. 31, 1957; D.O., College of Osteopathic Medicine, and Surgery, Des Moines, IA, 1984; family practice residency Memorial Hospital, Mt. Holly, NJ, 1984-87; elected by South Central Medical Society.

EL-DIN, AHMED R., Whitfield. Born Cairo, Egypt, Jan. 10, 1950; M.D., Ain Shams University School of Medicine, Egypt, 1973; interned, same, one year; pediatric residency, Ochsner Hospital, New Orleans, 1981-84; neonatology fellowship, University Medical Center, Jackson, MS, one year; elected by Central Medical Society.

EVANS, THOMAS CHARLES, JR., McComb. Born McComb, Oct. 15, 1944; M.D., University of Mississippi School of Medicine, Jackson, 1973; interned and two years medicine residency, Baylor Medical Center, Dallas, 1973-1975; elected by South Central Medical Society.

FORBES, ROBERT C., Jackson. Born Toronto, Canada, April 20, 1943; M.D., University of Toronto Faculty of Medicine, Ontario, Canada, 1967; interned one year, Toronto East General Hospital, Canada 1967-68; family medicine residency, University of Western Ontario London, Ontario, Canada; elected by Central Medical Society.

FRANK-TARSI, MARY ANNE, Charleston. Born Meadville, PA, May 11, 1943; M.D., University of Mississippi School of Medicine, Jackson, 1982; interned and family practice residency, University Medical Center, Jackson, 1982-85; elected by Northeast Mississippi Medical Society.

HENSON, KENNETH D., Meridian. Born New Orleans, Nov. 26, 1957; M.D., University of Mississippi School of Medicine, Jackson, 1984; interned and medicine residency, University Medical Center, Jackson, 1984-87; elected by East Mississippi Medical Society.

HILL, FRANK S., JR., Sumrall. Born Omaha, NE, May 6, 1935; M.D., University of Mississippi School of Medicine, Jackson, 1967; interned and radiology residency, University Medical Center, Jackson, 1967-71; elected by South Central Medical Society.

JACKSON, MELINDA C., Jackson. Born Welch, WV, March 24, 1954; M.D., West Virginia University School of Medicine, Morgantown, 1979; interned and medicine and psychiatry residency, same, 1979-84; elected by Central Medical Society.

KRAFTY, MARY BETH, Meridian. Born Fountain Hill, PA, May 17, 1957; M.D., Hahnemann Medical College of Philadelphia, PA, 1982; family practice residency, Monroeville, PA, 1982-85; elected by East Mississippi Medical Society.

KROOSS, WILLIAM F., II, Jackson. Born Opelika, AL, Oct. 18, 1948; M.D., Louisiana State University School of Medicine, New Orleans, 1976; family practice residency, Ft. Belvoir, VA, and Bogalusa, LA; elected by Central Medical Society.

LAUTNER, LLOYD W., Ocean Springs. Born Baton Rouge, LA, March 1, 1952; M.D., Louisiana State University School of Medicine, Shreveport, 1978; interned, one year, Earl K. Long Hospital Baton Rouge; elected by Singing River Medical Society.

MANUEL, WILBERT J., Pascagoula. Born Eunice, LA, Dec. 31, 1935; M.D., Louisiana State University School of Medicine, New Orleans, 1962; interned Brooke Hospital, San Antonio, TX, one year; dermatology residency, Letterman Hospital, San Francisco, 1967-70; elected by Singing River Medical Society.

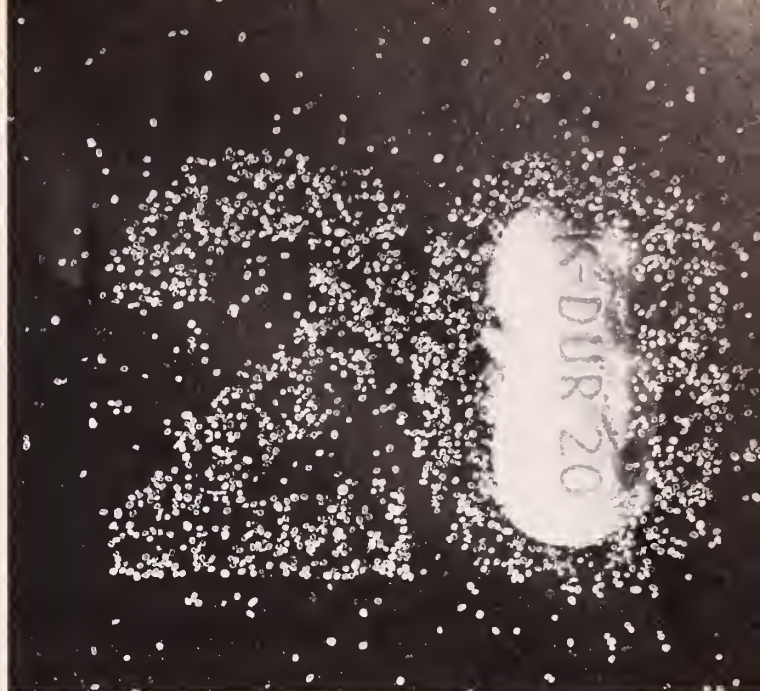
MCCASLIN, LUCINDA, JEAN, Jackson. Born Los Angeles, Jan. 1, 1950; M.D., University of Texas Medical School, San Antonio, 1984; interned and pediatric residency, Medical Center Hospital, San Antonio, 1984-87; elected by Central Medical Society.

MOSES, LOUIS JEFFERSON, Greenwood. Born Greenwood, MA, July 25, 1985; M.D., University of Mississippi School of Medicine, Jackson, 1984; interned and medicine residency, Methodist Hospital, Memphis, 1984-87; elected by Delta Medical Society.

ROOT, BENJAMIN ALLEN, JR., Jackson. Born Jackson, MS, June 22, 1952; M.D., University of Mississippi School of Medicine, Jackson, 1978; interned, one year, Los Angeles County USC Medical Center, Los Angeles, 1978-79; psychiatry residency, Tulane Medical Center, New Orleans, 1983-86; elected by Central Medical Society.

SINGH, JATINDER, Greenwood. Born India, Oct. 20, 1957; M.D., University of Mississippi School of Medicine, Jackson, 1984; interned and medicine residency, University Medical Center, Jackson, 1984-87; elected by Delta Medical Society.

SMITH, BENNETT E., JR., Hattiesburg. Born Oxford, MS, Aug. 2, 1947; M.D., University of Mississippi School of Medicine, Jackson, 1972; interned and



Most patients need only one.

K-DUR™ 20 | Microburst
(potassium chloride) 20mEq | Release
Sustained Release System™
Tablets

**A daily prophylactic dose
in a single tablet.**

Please see next page for brief summary of prescribing information.

KEY Key Pharmaceuticals, Inc.
Kenilworth, NJ 07033
World leader in drug delivery systems.

Copyright © 1987, Key Pharmaceuticals, Inc., Kenilworth, NJ 07033.
All rights reserved. KD-2055/14238603H 8/87

K-DURTM Microburst Release System (potassium chloride) Sustained Release Tablets

INDICATIONS AND USAGE: BECAUSE OF REPORTS OF INTESTINAL AND GASTRIC ULCERATION AND BLEEDING WITH SLOW-RELEASE POTASSIUM CHLORIDE PREPARATIONS, THESE DRUGS SHOULD BE RESERVED FOR THOSE PATIENTS WHO CANNOT TOLERATE OR REFUSE TO TAKE LIQUID OR EFFERESCENT POTASSIUM PREPARATIONS OR FOR PATIENTS IN WHOM THERE IS A PROBLEM OF COMPLIANCE WITH THESE PREPARATIONS.

1 For therapeutic use in patients with hypokalemia with or without metabolic alkalosis, in digitalis intoxication and in patients with hypokalemic familial periodic paralysis.

2 For the prevention of potassium depletion when the dietary intake is inadequate in the following conditions: Patients receiving digitalis and diuretics for congestive heart failure, hepatic cirrhosis with ascites, states of aldosterone excess with normal renal function, potassium-losing nephropathy, and with certain diarrheal states.

3 The use of potassium salts in patients receiving diuretics for uncomplicated essential hypertension is often unnecessary when such patients have a normal dietary pattern. Serum potassium should be checked periodically, however, and if hypokalemia occurs, dietary supplementation with potassium-containing foods may be adequate to control milder cases. In more severe cases supplementation with potassium salts may be indicated.

CONTRAINDICATIONS: Potassium supplements are contraindicated in patients with hyperkalemia since a further increase in serum potassium concentration in such patients can produce cardiac arrest. Hyperkalemia may complicate any of the following conditions: Chronic renal failure, systemic acidosis such as diabetic acidosis, acute dehydration, extensive tissue breakdown as in severe burns, adrenal insufficiency, or the administration of a potassium-sparing diuretic (e.g., spironolactone, triamterene).

Wax-matrix potassium chloride preparations have produced esophageal ulceration in certain cardiac patients with esophageal compression due to enlarged left atrium.

All solid dosage forms of potassium chloride supplements are contraindicated in any patient in whom there is cause for arrest or delay in tablet passage through the gastrointestinal tract. In these instances, potassium supplementation should be with a liquid preparation.

WARNINGS: Hyperkalemia—In patients with impaired mechanisms for excreting potassium, the administration of potassium salts can produce hyperkalemia and cardiac arrest. This occurs most commonly in patients given potassium by the intravenous route but may also occur in patients given potassium orally. Potentially fatal hyperkalemia can develop rapidly and be asymptomatic. The use of potassium salts in patients with chronic renal disease, or any other condition which impairs potassium excretion, requires particularly careful monitoring of the serum potassium concentration and appropriate dosage adjustment.

Interaction with Potassium-Sparing Diuretics—Hypokalemia should not be treated by the concomitant administration of potassium salts and a potassium-sparing diuretic (e.g., spironolactone or triamterene) since the simultaneous administration of these agents can produce severe hyperkalemia.

Gastrointestinal Lesions—Potassium chloride tablets have produced stenotic and/or ulcerative lesions of the small bowel and deaths. These lesions are caused by a high localized concentration of potassium ion in the region of a rapidly dissolving tablet, which injures the bowel wall and thereby produces obstruction, hemorrhage or perforation.

K-DUR tablets contain micro-crystalloids which disperse upon disintegration of the tablet. These micro-crystalloids are formulated to provide a controlled release of potassium chloride. The dispersibility of the micro-crystalloids and the controlled release of ions from them are intended to minimize the possibility of a high local concentration near the gastrointestinal mucosa and the ability of the KCl to cause stenosis or ulceration. Other means of accomplishing this (e.g., incorporation of potassium chloride into a wax matrix) have reduced the frequency of such lesions to less than one per 100,000 patient years (compared to 40–50 per 100,000 patient years with enteric-coated potassium chloride) but have not eliminated them. The frequency of GI lesions with K-DUR tablets is, at present, unknown. K-DUR tablets should be discontinued immediately and the possibility of bowel obstruction or perforation considered if severe vomiting, abdominal pain, distention, or gastrointestinal bleeding occurs.

Metabolic Acidosis—Hypokalemia in patients with metabolic acidosis should be treated with an alkalinizing potassium salt such as potassium bicarbonate, potassium citrate, potassium acetate, or potassium gluconate.

PRECAUTIONS: The diagnosis of potassium depletion is ordinarily made by demonstrating hypokalemia in a patient with a clinical history suggesting some cause for potassium depletion. In interpreting the serum potassium level, the physician should bear in mind that acute alkalosis per se can produce hypokalemia in the absence of a deficit in total body potassium while acute acidosis per se can increase the serum potassium concentration into the normal range even in the presence of a reduced total body potassium. The treatment of potassium depletion, particularly in the presence of cardiac disease, renal disease, or acidosis requires careful attention to acid-base balance and appropriate monitoring of serum electrolytes, the electrocardiogram, and the clinical status of the patient.

Laboratory Tests: Regular serum potassium determinations are recommended. In addition, during the treatment of potassium depletion, careful attention should be paid to acid-base balance, other serum electrolyte levels, the electrocardiogram, and the clinical status of the patient, particularly in the presence of cardiac disease, renal disease, or acidosis.

Drug Interactions: Potassium-sparing diuretics; see **WARNINGS**.

Carcinogenesis, Mutagenesis, Impairment of Fertility: Long-term carcinogenicity studies in animals have not been performed.

Pregnancy Category C: Animal reproduction studies have not been conducted with K-DUR. It is also not known whether K-DUR can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. K-DUR should be given to a pregnant woman only if clearly needed.

Nursing Mothers: The normal potassium ion content of human milk is about 13 mEq per liter. Since oral potassium becomes part of the body potassium pool, so long as body potassium is not excessive, the contribution of potassium chloride supplementation should have little or no effect on the level in human milk.

Pediatric Use: Safety and effectiveness in children have not been established.

ADVERSE REACTIONS: One of the most severe adverse effects is hyperkalemia (see **CONTRAINDICATIONS**, **WARNINGS**, and **OVERDOSAGE**). There have also been reports of upper and lower gastrointestinal conditions including obstruction, bleeding, ulceration, and perforation (see **CONTRAINDICATIONS** and **WARNINGS**); other factors known to be associated with such conditions were present in many of these patients.

The most common adverse reactions to oral potassium salts are nausea, vomiting, abdominal discomfort, and diarrhea. These symptoms are due to irritation of the gastrointestinal tract and are best managed by taking the dose with meals or reducing the dose.

Skin rash has been reported rarely.

OVERDOSAGE: The administration of oral potassium salts to persons with normal excretory mechanisms for potassium rarely causes serious hyperkalemia. However, if excretory mechanisms are impaired or if potassium is administered too rapidly intravenously, potentially fatal hyperkalemia can result (see **CONTRAINDICATIONS** and **WARNINGS**). It is important to recognize that hyperkalemia is usually asymptomatic and may be manifested only by an increased serum potassium concentration and characteristic electrocardiographic changes (peaking of T-waves, loss of P-waves, depression of S-T segment, and prolongation of the QT-interval). Late manifestations include muscle-paralysis and cardiovascular collapse from cardiac arrest.

Treatment measures for hyperkalemia include the following:

- 1 Elimination of foods and medications containing potassium and of potassium-sparing diuretics
- 2 Intravenous administration of 300 to 500 ml/hr of 10% dextrose solution containing 10–20 units of insulin per 1,000 ml.
- 3 Correction of acidosis, if present, with intravenous sodium bicarbonate.
- 4 Use of exchange resins, hemodialysis, or peritoneal dialysis.

In treating hyperkalemia, it should be recalled that in patients who have been stabilized on digitalis, too rapid a lowering of the serum potassium concentration can produce digitalis toxicity.

1002004

KEY Key Pharmaceuticals, Inc.
Kenilworth, NJ 07033 (USA)
World leader in drug delivery systems.

13944326
Rev 4/87

pediatric residency, University Medical Center, Jackson, 1972-74; adolescent medicine fellowship, University of Colorado, 1974-75; elected by South Mississippi Medical Society.

STUMME, LUTHER PAUL, Beldon. Born Dubuque, IA, Oct. 8, 1931; M.D., University of Iowa College of Medicine, Iowa City, 1958; interned Emanuel Hospital, Portland, OR, one year; neurology residency, University of Oregon, Portland, 1969-72; elected by Northeast Mississippi Medical Society.

Tew, WILLIAM E., Jackson. Born Laurel, MS, Feb. 13, 1957; M.D., University of Mississippi School of Medicine, Jackson, 1982; interned and radiology residency, University Medical Center, Jackson, MS, 1982-83 and 1984-87; elected by Central Medical Society.

WALLACE, PERRY, Meridian. Born Hollandale, Jan. 13, 1957; M.D., University of Mississippi School of Medicine, Jackson, 1983; interned, one year Howard University Hospital, Washington, DC; medicine residency, same, 1984-85 and August 1986-February, 1987, and University Medical Center, Jackson, February-July 1987; elected by East Mississippi Medical Society.

WEST, FLAVIA H., Ecu. Born Tupelo, May 27, 1954; M.D., University of Mississippi School of Medicine, Jackson, 1984; interned, one year, Baptist Hospital, Memphis, 1984-85; elected by Northeast Mississippi Medical Society.

WISNIEWSKI, PETER F., Houlika. Born Chicago, Dec. 28, 1949; D.O., University of Osteopathic Medicine and Surgery, Des Moines, IA, 1977; interned, one year, Garden City Hospital, Garden City, MI; elected by Northeast Mississippi Medical Society.

JOIN  TODAY

JOURNAL MSMA

DEATHS

EASTERLY, CLAY E., Biloxi. Born Baywood, LA, Feb. 5, 1913; M.D., Louisiana State University School of Medicine, New Orleans, 1941; interned Charity Hospital, New Orleans, 1941-42; Surgery residency, VA Hospital, New Orleans, 1948-52 and VA Hospital, Jackson, MS, 1952-55; died March 15, 1988, age 75.

FOLK, BENJAMIN P., JR., Jackson. Born Tallulah, LA, Aug. 14, 1917; M.D., Vanderbilt University School of Medicine, Nashville, 1941; interned, one year, same; medicine residency, Johns Hopkins, Baltimore, MD, 1947-50; died March 20, 1988, age 71.

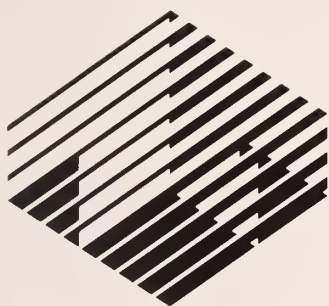
GOETZ, CATHERINE G., Jackson. Born Natchez, Sept. 28, 1917; M.D., Louisiana State University School of Medicine, New Orleans, 1950; interned, one year, Hotel Dieu, New Orleans; pathology res-

idency, Hotel Dieu, 1951-52; LSU, 1952-54; and Charity Hospital, New Orleans, 1954-55; died Feb. 9, 1988, age 71.

GOODE, PAUL E., Jackson. Born Gadsden, AL, Feb. 14, 1925; M.D., Tulane University School of Medicine, New Orleans, 1949; interned Charity Hospital, New Orleans, one year; died March 1988, age 63.

JUSTICE, T. T., JR., Gulfport. Born Pascagoula, Feb. 5, 1921; M.D., University of Tennessee School of Medicine, Memphis, 1945; interned, Shreveport Charity Hospital, Shreveport, LA, 1945-46; medicine residency, LSU, New Orleans, LA, 1948-51; died Feb. 13, 1988, age 67.

KULJIS, JOSEPH, Biloxi. Born Biloxi, July 6, 1908; M.D., Tulane University School of Medicine, New Orleans, 1934; interned Hoboken, NJ, and residency St. Frances Hospital, Columbia, SC; died March 16, 1988, age 79.



**We earn
your trust every day.™**



Trustmark™
National Bank

Jackson/Bogue Chitto/Brookhaven/Canton/Clinton/Columbia
Georgetown/Gloster/Greenville/Greenwood/Hattiesburg/Hazlehurst
Leland/Liberty/Madison/Magee/McComb/Pearl/Petal/Ridgeland
Tylertown/Wesson

Member FDIC

Does Your Office Use **ENVELOPES?**

5000 for \$99⁹⁵

(#10 Reg. Add 10%
for Window Envelopes)

Up to four lines printed in upper left corner.
Packed 500 per box. Price includes your imprint
in black or standard red, blue or green ink.

Mississippi Residents add 6% Sales Tax

All **Prepaid Orders** will be shipped on our
trucks or UPS at no additional charge

Mail or Phone Orders To:

Northtowne Printers

3909 Northview Dr.
Jackson, MS 39206

(601) 981-2675

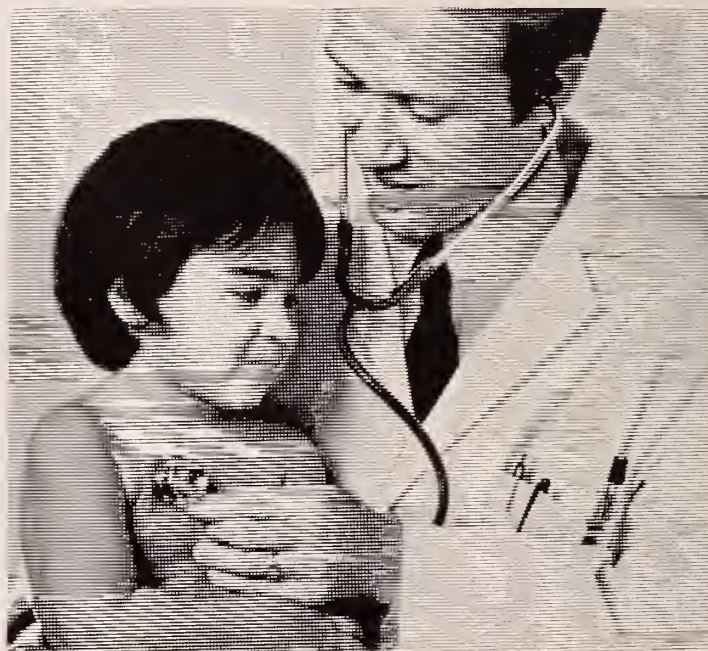
FAMILY PRACTICE. A REWARDING EXPERIENCE IN ARMY MEDICINE.

The Army has more soldiers with families than ever before. So when you join the Army Medical Team as a Family Practitioner, expect to spend most of your time serving not only soldiers, but their spouses and children, too. What's more, you won't have to worry about the paperwork, malpractice insurance premiums, or the costs incurred in running a private practice.

Expect to work in a highly challenging and varied environment. Working with a team of highly trained professionals, you can receive assignments almost anywhere in the United States; the Army offers the largest system of comprehensive health care in the nation. Family Practice positions are also available overseas, in Germany and Korea.

The benefits package available to Army Family Practitioners is quite attractive. You'll receive 30 days paid vacation, opportunities to continue education and conduct research, a chance to travel, and reasonable work hours.

All in all, your Army Family Practice will be a rewarding experience. Not only for you, but for Army families, too. Talk to your Army Medical Department Counselor for more information.



**ARMY MEDICINE
144 ELK PLACE, SUITE 1514
NEW ORLEANS, LA 70112-2640
(504) 522-1871 COLLECT**

ARMY MEDICINE. BE ALL YOU CAN BE.

Medico-Legal Brief

Patient Has Constitutional Right To Refuse Life Sustaining Treatment

A patient has a constitutional right to refuse life-sustaining medical treatment, the Arizona Supreme Court ruled.

A 64-year-old patient was admitted to a nursing home in 1979. After admission, her physical and mental conditions deteriorated to the point where she received fluids and nourishment through a nasogastric tube. An action was initiated in May 1985 to appoint a guardian for the purpose of consenting to removal of the nasogastric tube. The court appointed a guardian and notified three siblings of the patient of the guardianship proceedings.

Testimony indicated that she had suffered three strokes and was suffering from a degenerative neural muscular disease and/or an organic brain syndrome. She was unable to care for herself and remained in bed in a fetal position. Nurses administered basic care and medication. After considering her diagnosis and prognosis, her treating physician had placed on her chart a "Do Not Resuscitate" order and a "Do Not Hospitalize" order. The DNR order directed that she not be resuscitated if she suffered cardiac arrest or a similar condition. The DNH order permitted medical personnel to provide only basic

comfort care. Certain diseases, such as pneumonia, gangrene, and urinary tract infections, were to run their natural course. Her siblings expressed a willingness to abide by the decision to place DNR and DNH orders on her medical chart.

A court-appointed neurologist testified that the patient existed in a profound vegetative state from which she would never recover. According to him, she was brain-dead because all parts of her brain necessary for any sort of cognitive function, self-awareness, and perception of surroundings no longer functioned. The trial court appointed a guardian without restriction, and an appellate court affirmed, stating that the best interests of the patient should be considered and that certain procedural safeguards should be followed in similar cases.

On appeal, the Arizona Supreme Court said that the right to refuse life-sustaining treatment was encompassed within the right of privacy of the state constitution and the privacy decisions of the U.S. Supreme Court. The court said that there was no state interest overriding the patient's right to refuse treatment. Although the patient was incapable of exercising her right to refuse treatment, the court-appointed guardian may make the decision on the patient's behalf based on what was in the patient's best interests, the high court said. — *Rasmussen by Mitchell v. Fleming*, 741 P.2d 674 (Ariz.Sup.Ct., July 23, 1987).



Doctor,

Have you ever looked for a different way to say "Thank You," "Congratulations," or "Get Well Soon"?

All of these messages are available, along with memorial tributes, in greeting cards from the MSMA Auxiliary. Each card signifies your donation to the AMA-ERF in the name of a friend or colleague.

For information about AMA-ERF greeting cards for year-round use, contact a member of your local MSMA Auxiliary, or Kathy Carmichael, 106 Colonial Place, Hattiesburg, MS 39401; telephone 268-9642.

UMC Medical School Only One with 100% Match

The School of Medicine at the University of Mississippi Medical Center was the only medical school in the country to have all its seniors "match" in the 1988 National Resident Matching Program.

According to Dr. Carl Evers, medical school associate dean for academic affairs, all 103 of the UMC seniors who participated in the match program got one of their choices; 67 matched with their first choice.

Five students did not participate in the match program because they were committed to military service after graduation and all had previously been selected by military postgraduate training programs.

"I think this is just one more indication of the quality of our students and medical school," Evers said.

POSTGRADUATE CALENDAR

May

PEDIATRIC DAYCARE

May 21

Ramada Renaissance Hotel, Jackson

June

MISSISSIPPI NEUROSURGICAL SOCIETY ANNUAL
MEETING

June 10-11

Ramada Renaissance Hotel, Jackson

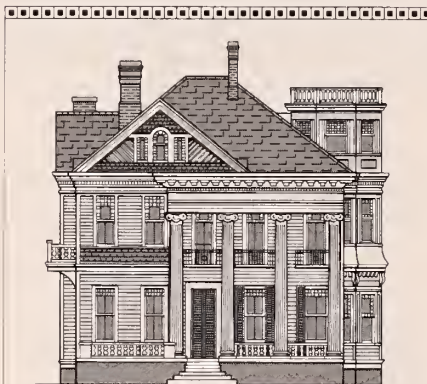
August

OPHTHALMOLOGY UPDATE

August 6

Ramada Renaissance Hotel, Jackson

For more information or a program brochure, contact the University of Mississippi Medical Center Division of Continuing Health Professional Education, 2500 North State Street, Jackson, Mississippi 39216-4505; or call (601) 984-1300.



*At the
Millsaps Buie House, our
bed and breakfast accommodations
recall those graceful days before the
turn of the century.*

*Whether business or pleasure
brings you to Jackson, our home
and our hearts are yours.*



601 352-0221

628 North State Street, Jackson, MS 39202

A 19th century urban retreat for the 20th century traveler

Who would say something nice about a bill collector?

Over 1,200 professional and trade associations, including yours.

It's true. The bill collecting services of I.C. System have been endorsed by over 1,200 associations around the country, including the one you belong to.

We're proud of these endorsements. We've made a concerted effort to bring high standards of professionalism, ethics, and effectiveness to the collection process. We believe we've succeeded and, apparently, your association agrees.

So if you've been billing people who aren't paying you, now you know who to contact.

Although we're headquartered in St. Paul, Minnesota, we have communication centers in every state of the union. We'll assign a local I.C. representative to your account who will be supported by a full range of collection services and

personnel, including carefully-trained telephone contact specialists. We'll even provide initial training on how to use our service for the person(s) in your office handling accounts receivable.

But most important, we guarantee results. Our fee structure combines a very competitive commission rate with a retainer (corporate or standard) scaled to your needs. And we guarantee to keep collecting for as long as it takes to recover at least ten times the amount of that retainer.

To find out how the I.C. System approach can work for you, call toll free (800) 824-9469, ext. 330. In Minnesota, call (612) 483-8201, ext. 330. Or return the coupon



I want to recover the money that's owed me. Please provide me with information on the I.C. System approach.

Name

Title

Firm

Address

City State Zip

Telephone number

Mail to: I.C. System, Inc., 444 East Highway 96 PO Box 64639, St. Paul, Minnesota 55164-0639

MEDICAL CLINIC For Sale or Lease

Due to retirement, physician who has been at this location since 1955 wishes to sell or lease medical clinic. All medical equipment, including lab and x-ray, furniture and fixtures included.

2000 square-foot building on 30 × 208.6 lot with parking in the rear. Prime Northeast Jackson location, convenient to area hospitals. Two consultation rooms, three exam rooms, minor surgery room, nurse's office, laboratory and x-ray. Ideal for 2 doctors.

For more information, please contact:

Mr. Jack Lowery
Deposit Guaranty National Bank
Trust Division
601-354-8118

FOR SALE

Medical Clinic Building, Oxford, MS

- Located in medical area next to hospital and nursing home
- Designed for two physicians
- Immediate occupancy
- Over 3,000 sq. ft. of space
- Priced reasonably

Contact Annette Lee at
601-234-5621
601-234-2497

PLACEMENT SERVICE

PHYSICIANS AVAILABLE

PHYSICIAN COMPLETING RESIDENCY in obstetrics and gynecology seeks practice opportunity in Mississippi. Available July 1989. Contact Greg Patton, M.D., 2325 Glenmary Avenue #2, Louisville, KY 40204.

EXPERIENCED PHYSICIAN, seeking licensure, wants position as assistant. Location flexible. P.O. Box 225, Bay Springs, MS 39422.

PHYSICIAN completing residency in general surgery, and spouse (board-eligible pediatrician) seek practice opportunities in Mississippi. Location flexible. Contact Dinesh Ranjan, M.D., 2118 Chantilla Rd., Catonsville, MD 21228.

A Commitment to Excellence in Health Care

Mississippi Emergency Association, P.A. (MEA) a physician-owned and managed group has created an environment for physicians that promotes the ideals of private practice while freeing doctors from the administrative and financial demands of the private practitioner.

Board certified or board eligible physicians in the area of Emergency Medicine, Internal Medicine, and Family Medicine are presented a variety of professional and personal rewards, including excellent salaries, benefits, and advancement opportunities.

MEA is a dynamic, growing corporation that delivers quality health care. If you would like to know what career opportunities we can offer you, send your curriculum vitae to Sheila M. Stringer or call (601) 366-6503.

**Mississippi Emergency
Association, P.A.
P.O. Box 12917
Jackson, MS 39236-2917**

PLACEMENT SERVICE/Continued

NATIVE MISSISSIPPIAN seeking practice opportunity in Ob-Gyn. Will complete residency and be available in July 1989. Contact Walter Wolfe, M.D. 722 West Austin Dr., Peoria, IL 61614; (309) 655-2000.

PHYSICIANS WANTED

EMERGENCY PHYSICIANS WANTED. Part-time and full-time positions in northeast Mississippi. Call (601) 328-8385.

BOARD CERTIFIED or board eligible orthopedist wanted to join established clinic in metropolitan area of Mississippi. Three or four-man rotation. General orthopedics with interest in sports medicine desired. Box O, Miss. State Medical Association, P.O. Box 5229, Jackson, MS 39216.

PHYSICIANS NEEDED

Physicians (especially specialists such as ophthalmologists, pediatricians, orthopedists, neurologists, etc.) interested in performing consultative evaluations (according to Social Security guidelines) should contact the Medical Relations Office. WATS 1-800-962-2230; Jackson, 922-6811; extensions 2276, and 2190.



DISABILITY DETERMINATION SERVICES
1-800-962-2230

FULL-TIME EMERGENCY PHYSICIAN wanted. Call Jerry Lewis (817) 776-4121.

PRIMARY CARE PHYSICIANS needed immediately for single-specialty groups and multispecialty groups. For further information call collect. Jerry Lewis (817) 776-4121.

NEUROSURGEON needed immediately for 50-member multi-specialty group. Excellent opportunity. The Lewis Group, 1227 N. Valley Mills, Waco, TX 76710. Phone (817) 776-4121.

NEUROLOGIST needed immediately for 50-member multi-specialty group. Excellent opportunity. The Lewis Group, 1227 N. Valley Mills, Waco, TX 76710. Phone (817) 776-4121.

PEDIATRICIAN needed immediately for 50-member multi-specialty clinic. Excellent opportunity. The Lewis Group, 1227 N. Valley Mills, Waco, TX 76710. Phone (817) 776-4121.

POSITION AVAILABLE for young internist and family practitioner in rural Mississippi. Excellent living conditions and schools. Contact: Dr. D. K. Goel, P.O. Box 268, Prentiss, MS 39474; (601) 792-5183 or (601) 371-2572.

HEMATOLOGY/ONCOLOGY: BC to affiliate with 200+ bed hospital in beautiful southern university community of 100K; drawing area 300K. Coverage provided. Financial benefits package includes: first year salary guarantee plus benefits. Excellent schools, 90 minutes from major cities and Gulf Coast. Contact Sandy Cundiff, Tyler & Company, 9040 Roswell Rd., Atlanta, GA 30350. Call (404) 641-6411.

PHYSICIANS WANTED IN TEXAS & OKLAHOMA: Cardiology, Cardiovascular Surgery, Dermatology, ENT, Family Practice, General Surgery, Internal Medicine, Ob/Gyn, Orthopedic Surgery, Pulmonology, Urology. Excellent quality of life, first year guarantee, etc. Other opportunities available also. Reply with C/V or call Armando L. Frezza, Medical Support Services, 8806 Balcones Club Dr., Austin, TX 78750; (512) 331-4164.

SUNBELT: BE/BC PHYSIATRIST needed for rehabilitation center in university setting; faculty appointment possible. Practice offers state-of-the-art facilities, great coverage and both inpatient and outpatient care. Excellent financial package with relocation assistance. Metropolitan community with easy access to coastal recreation. Search conducted by: Physician International, 4-MS Vermont St., Buffalo, NY 14213; (716) 884-3700.

TWO FAMILY MEDICINE PHYSICIANS needed to fill vacancies. Options of practice include: (a) partnership with local well-established Family Physician who has excellent practice. Terms negotiable with this physician; (b) solo practice with contract that includes guaranteed salary, office, staff, malpractice insurance, supplies and moving costs. Franklin County Hospital meets HMSA criteria. The county is rural, has excellent school system, and is within 30 minutes of three larger cities with established referral system. Call (601) 384-5801; Bill Martin, Administrator, Franklin County Hospital, Meadville, MS.

CLASSIFIED

VISION BLOOD INSTRUMENT. Abbot Labs. Model 1537. \$15,000. Still in warranty. Call (601) 362-1577.

X-RAY MACHINE in excellent condition, medical supplies and equipment, waiting room furniture. Best offer. Call (601) 328-0830.

— Next Month in JOURNAL MSMA —

"Medial Collateral Ligament Tears of the Knee: A New Approach"

"Surgical Management of Small Cell Lung Cancer: Case Report"

"Discovery: Anatomy of and Some Experiences With"

Index to Advertisers

Bryton Group	148	OffiSource	135
Dewey Hawkins Realty	165	Palisades Pharmaceuticals	10
Disability Determination Service	166	Postgraduate Medicine	4
Harreld Chevrolet	157	Premier Printing	156
Hinds General Hospital	140	Roche Laboratories	third, fourth covers, 14A
Key Pharmaceuticals	159, 160	Smith Kline and French	14A
Eli Lilly and Co.	7	St. Stanislaus	136
Marion Laboratories	10, 10A	Trustmark	161
Medical Assurance Co. of Miss.	second cover	U. S. Army	162
Millsaps Buie House	164	U. S. Army Reserve	8, 10B, 145
Miss. Emergency Association	165	Jon Wimbish	12
MSMA Benefit Plan and Trust	14	Wyeth-Ayerst Laboratories	6A, 6B, 6C, 6D
Northtowne Printers	161		

**You're
a Professional.**

**You need Professional
Health Insurance
Coverage.**

MSMA

Benefit Plan and Trust

MSMA Benefit Plan and Trust is a superior insurance program which fulfills the quality of coverage and affordability that everyone wants.

Sponsored by the Mississippi State Medical Association, the MSMA Benefit Plan and Trust offers life and health benefits to physician members of MSMA, their employees and families.

- \$1,000,000 lifetime benefits.
- Life Coverage up to \$50,000.
- Broad benefits with fair and equitable rates.
- Management by and for physicians.
- Non-profit and administered at lowest possible cost.

For Complete Description of Benefits Write:

MSMA Benefit Plan and Trust

P.O. Box 55509
Jackson, MS 39216

Before prescribing, see complete prescribing information in SK&F LAB CO. literature or PDR. The following is a brief summary.

Contraindications: There are no known contraindications to the use of 'Tagamet'.

Precautions: While a weak antiandrogenic effect has been demonstrated in animals, 'Tagamet' has been shown to have no effect on spermatogenesis, sperm count, motility, morphology or in vitro fertilizing capacity in humans.

In a 24-month toxicity study in rats at dose levels approximately 9 to 56 times the recommended human dose, benign Leydig cell tumors were seen. These were common in both the treated and control groups, and the incidence became significantly higher only in the aged rats receiving 'Tagamet'.

Rare instances of cardiac arrhythmias and hypotension have been reported following the rapid administration of 'Tagamet' HCl (brand of cimetidine hydrochloride) injection by intravenous bolus.

Symptomatic response to 'Tagamet' therapy does not preclude the presence of a gastric malignancy. There have been rare reports of transient healing of gastric ulcers despite subsequently documented malignancy.

Reversible confusional states have been reported on occasion, predominantly in severely ill patients.

'Tagamet' has been reported to reduce the hepatic metabolism of warfarin-type anticoagulants, phenytoin, propranolol, chlordiazepoxide, diazepam, lidocaine, theophylline and metronidazole. Clinically significant effects have been reported with the warfarin anticoagulants; therefore, close monitoring of prothrombin time is recommended, and adjustment of the anticoagulant dose may be necessary when 'Tagamet' is administered concomitantly. Interaction with phenytoin, lidocaine and theophylline has also been reported to produce adverse clinical effects.

However, a crossover study in healthy subjects receiving either 'Tagamet' 300 mg. q.i.d. or 800 mg. h.s. concomitantly with a 300 mg. b.i.d. dosage of theophylline (Theo-Dur®, Key Pharmaceuticals, Inc.),

demonstrated less alteration in steady-state theophylline peak serum levels with the 800 mg. h.s. regimen, particularly in subjects aged 54 years and older. Data beyond ten days are not available. (Note: All patients receiving theophylline should be monitored appropriately, regardless of concomitant drug therapy.)

Lack of experience to date precludes recommending 'Tagamet' for use in pregnant patients, women of childbearing potential, nursing mothers or children under 16 unless anticipated benefits outweigh potential risks; generally, nursing should not be undertaken in patients taking the drug since cimetidine is secreted in human milk.

Adverse Reactions: Diarrhea, dizziness, somnolence, headache, rash. Reversible arthralgia, myalgia and exacerbation of joint symptoms in patients with preexisting arthritis have been reported. Reversible confusional states (e.g., mental confusion, agitation, psychosis, depression, anxiety, hallucinations, disorientation), predominantly in severely ill patients, have been reported. Gynecomastia and reversible impotence in patients with pathological hypersecretory disorders receiving 'Tagamet', particularly in high doses, for at least 12 months, have been reported. Reversible alopecia has been reported very rarely. Decreased white blood cell counts in 'Tagamet'-treated patients (approximately 1 per 100,000 patients), including agranulocytosis (approximately 3 per million patients), have been reported, including a few reports of recurrence on rechallenge. Most of these reports were in patients who had serious concomitant illnesses and received drugs and/or treatment known to produce neutropenia. Thrombocytopenia (approximately 3 per million patients) and a few cases of aplastic anemia have also been reported. Increased serum transaminase and creatinine, as well as rare cases of fever, interstitial nephritis, urinary retention, pancreatitis and allergic reactions, including hypersensitivity vasculitis, have been reported. Reversible adverse hepatic effects, cholestatic or mixed cholestatic-hepatocellular in nature, have been reported rarely. Because of the predominance of cholestatic features, severe parenchymal injury is considered highly unlikely.

A single case of biopsy-proven periportal hepatic fibrosis in a patient receiving 'Tagamet' has been reported.

How Supplied: Tablets: 200 mg. tablets in bottles of 100; 300 mg. tablets in bottles of 100 and Single Unit Packages of 100 (intended for institutional use only); 400 mg. tablets in bottles of 60 and Single Unit Packages of 100 (intended for institutional use only), and 800 mg. Tiltab® tablets in bottles of 30 and Single Unit Packages of 100 (intended for institutional use only).

Liquid: 300 mg./5 ml., in 8 fl. oz. (237 ml.) amber glass bottles and in single-dose units (300 mg./5 ml.), in packages of 10 (intended for institutional use only).

Injection:

Vials: 300 mg./2 ml. in single-dose vials, in packages of 10 and 30, and in 8 ml. multiple-dose vials, in packages of 10 and 25.

Prefilled Syringes: 300 mg./2 ml. in single-dose prefilled disposable syringes.

Plastic Containers: 300 mg. in 50 ml. of 0.9% Sodium Chloride in single-dose plastic containers, in packages of 4 units. No preservative has been added.

ADD-Vantage® Vials: 300 mg./2 ml. in single-dose, ADD-Vantage® Vials, in packages of 25.

Exposure of the premixed product to excessive heat should be avoided. It is recommended the product be stored at controlled room temperature. Brief exposure up to 40°C does not adversely affect the premixed product.

'Tagamet' HCl (brand of cimetidine hydrochloride) injection premixed in single-dose plastic containers is manufactured for SK&F Lab Co. by Travenol Laboratories, Inc., Deerfield, IL 60015.

* ADD-Vantage® is a trademark of Abbott Laboratories.

BRS-TG-173B

Date of issuance Apr. 1987

SK&F LAB CO.

Cidra, P.R. 00639

© SK&F Lab Co., 1988

In peptic ulcer:

**RELIEF
REASSURANCE
REWARD**



Tagamet®
brand of cimetidine
First to Heal

You'll both feel good about it.

RESULTS

We need
someone
with the
confidence
of a surgeon,
the dedication
of a
marathoner
and the
courage of
an explorer.

We need someone to
fill a unique job opening.

Someone to spend
two years in another
country. To live and work
in another culture. To
learn a new language and
acquire new skills.

We need someone
who wants to help im-
prove other people's lives.
Who's anxious to build
lasting friendships. To
gain memories and expe-
rience that will last a
lifetime. And a sense of
fulfillment few jobs can
match.

We need a Peace Corps
volunteer. Interested?
The first step is easy.
Call 1-800-424-8580,
Ext. 93.

Peace Corps.

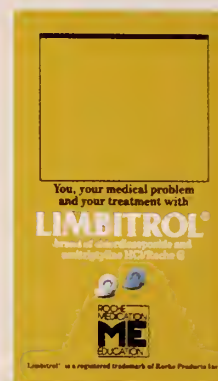
The toughest job you'll ever love.



FORGET



NOT



Roche Medication Education
Booklets supplement your instruc-
tions to patients. So forget **ME** not.
The Limbitrol® (chlor diazepoxide
and amitriptyline HCl/Roche)™
booklet is part of The Roche
Medication Education Program.

This important program helps your
patients remember and understand:

- What the medication is and why they are taking it
- The importance of staying with the prescribed course of treatment
- What foods and drinks to avoid
- Possible side effects

For a free supply of Limbitrol
booklets, complete the
coupon below and mail it to:
Professional Services Department,
Roche Laboratories, a division
of Hoffmann-La Roche Inc.,
340 Kingsland Street, Nutley,
New Jersey 07110-1199

NAME _____

STREET ADDRESS _____

CITY _____

STATE _____

ZIP _____



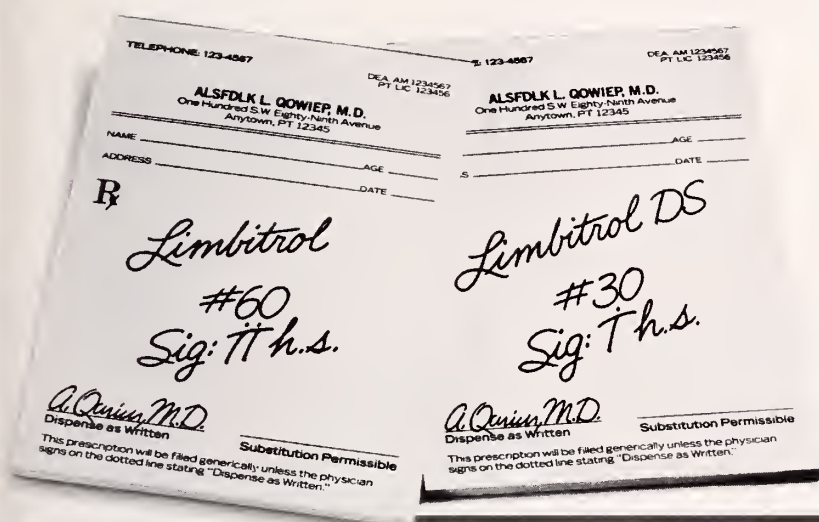
Roche Laboratories

a division of Hoffmann-La Roche Inc.

PLANDEX 35201

In moderate depression and anxiety

- ➡ 74% of patients experienced improved sleep after the first h.s. dose¹
- ➡ First-week improvement in somatic symptoms¹
- ➡ 50% greater improvement with Limbitrol in the first week than with amitriptyline alone²



Protect Your Prescribing Decision:
Specify "Do not substitute."

Limbitrol[®]
Each tablet contains 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt) ^(N)

Limbitrol[®] DS
Each tablet contains 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt) ^(N)

References: 1. Data on file, Hoffmann-La Roche Inc., Nutley, NJ. 2. Feighner VP, et al. *Psychopharmacology* 61:217-225, Mar 22, 1979.

Limbitrol[®] Tranquilizer—Antidepressant

Before prescribing, please consult complete product information, a summary of which follows:

Contraindications: Known hypersensitivity to benzodiazepines or tricyclic antidepressants; concomitant use with MAOIs or within 14 days of monoamine oxidase inhibitors (then initiate cautiously, gradually increasing dosage until optimal response is achieved); during acute recovery phase following myocardial infarction.

Warnings: Use with caution in patients with history of urinary retention or angle-closure glaucoma. Severe constipation may occur when used with anticholinergics. Closely supervise cardiovascular patients. Arrhythmias, sinus tachycardia, prolongation of conduction time, myocardial infarction and stroke reported with tricyclic antidepressants, especially in high doses. Caution patients about possible combined effects with alcohol and other CNS depressants and against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving).

Usage in Pregnancy: Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations. Consider possibility of pregnancy when instituting therapy.

Withdrawal symptoms of the barbiturate type have occurred after discontinuation of benzodiazepines (see Drug Abuse and Dependence).

Precautions: Use cautiously in patients with a history of seizures, in hyperthyroid patients, those on thyroid medication, patients with impaired renal or hepatic function. Because of suicidal ideation in depressed patients, do not permit easy access to large quantities of drug. Periodic liver function tests and blood counts recommended during prolonged treatment. Amitriptyline may block action of guanethidine or similar antihypertensives. When tricyclic antidepressants are used concomitantly with cimetidine (Tagamet), clinically significant effects have been reported involving delayed elimination and increasing steady-state concentrations of the tricyclic drugs. Use of Limbitrol with other psychotropic drugs has not been evaluated; sedative effects may be additive. Discontinue several days before surgery. Limit concomitant administration of ECT to essential treatment. See Warnings for precautions about pregnancy. Should not be taken during the nursing period or by children under 12. In elderly and debilitated, limit to smallest effective dosage to preclude ataxia, oversedation, confusion or anticholinergic effects. Inform patients to consult physician before increasing dose or abruptly discontinuing this drug.

Adverse Reactions: Most frequent: drowsiness, dry mouth, constipation, blurred vision, dizziness, bloating. Less frequent: vivid dreams, impotence, tremor, confusion, nasal congestion. Rare: granulocytopenia, jaundice, hepatic dysfunction. Others: many symptoms associated with depression including anorexia, fatigue, weakness, restlessness, lethargy.

Adverse reactions not reported with Limbitrol but reported with one or both components or closely related drugs: **Cardiovascular:** Hypotension, hypertension, tachycardia, palpitations, myocardial infarction, arrhythmias, heart block, stroke. **Psychiatric:** Euphoria, apprehension, poor concentration, delusions, hallucinations, hypomania, increased or decreased libido. **Neurologic:** Incoordination, ataxia, numbness, tingling and paresthesias of the extremities, extrapyramidal symptoms, syncope, changes in EEG patterns. **Anticholinergic:** Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract. **Allergic:** Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus. **Hematologic:** Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia. **Gastrointestinal:** Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, black tongue. **Endocrine:** Testicular swelling, gynecostasia in the male, breast enlargement, galactorrhea and minor menstrual irregularities in the female, elevation and lowering of blood sugar levels, and syndrome of inappropriate ADH (antidiuretic hormone) secretion. **Other:** Headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, jaundice, alopecia, parotid swelling.

Drug Abuse and Dependence: Withdrawal symptoms similar to those noted with barbiturates and alcohol have occurred following abrupt discontinuance of chlordiazepoxide; more severe seen after excessive doses over extended periods; milder after taking continuously at therapeutic levels for several months. Withdrawal symptoms also reported with abrupt amitriptyline discontinuation. Therefore, after extended therapy, avoid abrupt discontinuation and taper dosage. Carefully supervise addiction-prone individuals because of predisposition to habituation and dependence.

Overdosage: Immediately hospitalize patient. Treat symptomatically and supportively. I.V. administration of 1 to 3 mg physostigmine salicylate may reverse symptoms of amitriptyline poisoning. See complete product information for manifestation and treatment.

How Supplied: Double strength (DS) Tablets, white, film-coated, each containing 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt), and Tablets, blue, film-coated, each containing 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt)—bottles of 100 and 500; Tel-E-Dose[®] packages of 100; Prescription Paks of 50.



ROCHE PRODUCTS INC.
Manati, Puerto Rico 00701

In the depressed and anxious patient

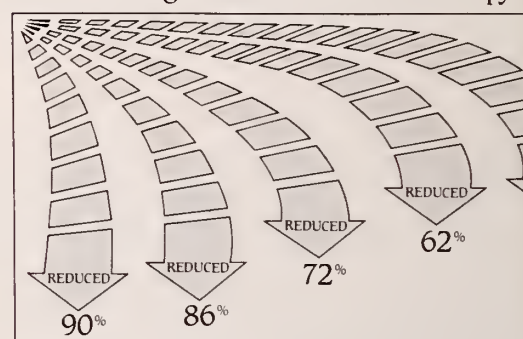
See Improvement In The First Week...¹

And The Weeks That Follow

- ➔ 74% of patients experienced improved sleep after the first *h.s.* dose¹
- ➔ First-week reduction in somatic symptoms¹

Caution patients about the combined effects of Limbitrol with alcohol or other CNS depressants and about activities requiring complete mental alertness, such as operating machinery or driving a car. In general, limit dosage to the lowest effective amount in elderly patients.

Percentage of Reduction in Individual Somatic Symptoms During First Week of Limbitrol Therapy*



VOMITING NAUSEA HEADACHE ANOREXIA CONSTIPATION

*Patients often presented with more than one somatic symptom.

Limbitrol[®]

Each tablet contains 5 mg clordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt) (IV)

Limbitrol DS[®]

Each tablet contains 10 mg clordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt) (IV)

Copyright © 1988 by Roche Products Inc. All rights reserved.
Please see summary of product information inside back cover.

N.Y. ACADEMY OF MED
2 EAST 103RD ST
NEW YORK
NY 10029-5293



JOURNAL

OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION

JUNE

1988



David R. Steckler, M.D. — 1988-89 MSMA President

Your confidence moves us. Again.

This year, more Mississippi doctors insured with us than with any other firm. Your confidence moves us . . . in more ways than one.

Growth through stability. Since we wrote our first policy in November of 1977, Medical Assurance Company has experienced steady growth and our membership is constantly increasing. The reason that more and more physicians are turning to us is simple: They know that they are receiving the most cost effective coverage backed by a financially sound company.

At Medical Assurance Company, savings and financial strength are provided by a program of sound investments and underwriting guidelines. Our staff is made up of experienced insurance professionals. And all claims are

reviewed by a panel of medical experts, so you can rest assured that your needs are understood.

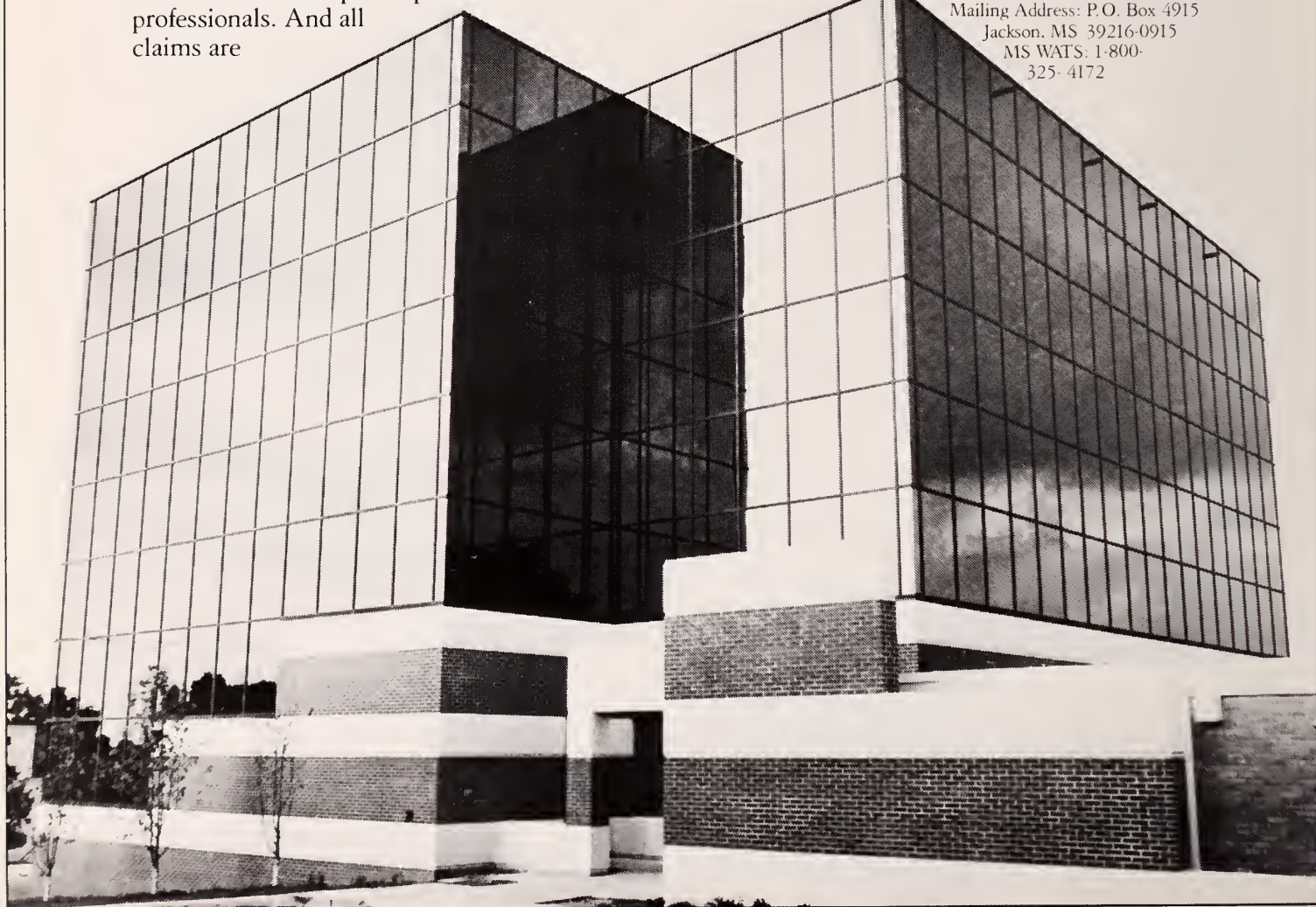
A new location. To house a larger staff and to provide even better service, we have moved back to the State Medical Association Building, this time occupying an entire floor.

For answers to any questions you might have regarding medical professional liability insurance, visit us in our new offices on Riverside Drive, or call us anytime.



Medical Assurance Company of Mississippi

Street Address: Suite 301
735 Riverside Dr., Jackson, MS
PHONE: (601) 353-2000
Mailing Address: P.O. Box 4915
Jackson, MS 39216-0915
MS WATS: 1-800-
325-4172



JOURNAL

OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION

JUNE 1988

VOLUME XXIX

NUMBER 6

SCIENTIFIC

- Medial Collateral Ligament Tears of the Knee: A New Approach** 167
Walter R. Shelton, M.D.
- Surgical Management of Small Cell Lung Cancer: A Case Report** 169
Bobby Graham, Jr., M.D., Tawfiq Khansur, M.D., Bruce Lambuth, M.D. and Lodovico Balducci, M.D.
- Discovery: Anatomy of and Some Experiences With** 173
James D. Hardy, M.D.

EDITORIALS

- Looking Toward the Future** 178
David R. Steckler, M.D.
- Fat Cats** 179
Joseph E. Johnston, M.D.

DEPARTMENTS

- News** 181
- Medico-Legal Brief** 183
- Personals** 185
- New Members** 189
- Deaths** 189
- Placement Service** 190

EDITOR

Myron W. Lockey, M.D.

EDITOR EMERITUS

W. Moncure Dabney, M.D.

ASSOCIATE EDITORS

Arthur A. Derrick, Jr., M.D.

Joseph E. Johnston, M.D.

MANAGING EDITOR

Patsy Silver

PUBLICATIONS COMMITTEE

Richard C. Miller, M.D.,
Chairman

George H. Martin, M.D.

William J. Gibson, M.D.
and the editors

THE ASSOCIATION

David R. Steckler, M.D.
President

Don Q. Mitchell, M.D.
Secretary-Treasurer

James C. Waites, M.D.
Speaker

H. Vann Craig, M.D.
Vice Speaker

Charles L. Mathews
Executive Director

*Cover photo: Michael Shumway,
The Studio, Vidalia, Louisiana*

Copyright © 1988, Mississippi State Medical Association. The views expressed in this publication reflect the opinions of the authors and do not necessarily state the opinions or policies of the Mississippi State Medical Association.

THE JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION (ISSN 0026-6393) is owned and published monthly by the Mississippi State Medical Association, founded 1856, at 735 Riverside Drive, Jackson, Mississippi 39202. Subscription rate, \$25.00 per annum; \$35.00 per annum for foreign subscriptions; \$2.25 per copy, as available. Advertising rates furnished on request. Printed by The Ovid Bell Press, Inc., Fulton, Missouri. Second-class postage paid at Jackson, Mississippi, and at additional mailing offices. POSTMASTER: Send address changes to Mississippi State Medical Association, P.O. Box 5229, Jackson, Mississippi 39216.

A NEW H_2 Antagonist

AXID[®] 300mg

nizatidine

Effective once-nightly
duodenal ulcer therapy available in a
Unique Convenience Pak
for better patient compliance



AXID[®]

nizatidine capsules

Brief Summary. Consult the package insert for prescribing information.

Indications and Usage: Axid is indicated for up to eight weeks for the treatment of active duodenal ulcer. In most patients, the ulcer will heal within four weeks.

Axid is indicated for maintenance therapy for duodenal ulcer patients, at a reduced dosage of 150 mg h.s. after healing of an active duodenal ulcer. The consequences of continuous therapy with Axid for longer than one year are not known.

Contraindication: Axid is contraindicated in patients with known hypersensitivity to the drug and should be used with caution in patients with hypersensitivity to other H_2 -receptor antagonists.

Precautions: General—1. Symptomatic response to nizatidine therapy does not preclude the presence of gastric malignancy.
2. Because nizatidine is excreted primarily by the kidney, dosage should be reduced in patients with moderate to severe renal insufficiency.

3. Pharmacokinetic studies in patients with hepatorenal syndrome have not been done. Part of the dose of nizatidine is metabolized in the liver. In patients with normal renal function and uncomplicated hepatic dysfunction, the disposition of nizatidine is similar to that in normal subjects.

Laboratory Tests—False-positive tests for urobilinogen with Multistix[®] may occur during therapy with nizatidine.

Drug Interactions—No interactions have been observed between Axid and theophylline, chlorazepoxide, lorazepam, lidocaine, phenytoin, and warfarin. Axid does not inhibit the cytochrome P-450-linked drug-metabolizing enzyme system; therefore, drug interactions mediated by inhibition of hepatic metabolism are not expected to occur. In patients given very high doses (3,900 mg) of aspirin daily, increases in serum salicylate levels were seen when nizatidine, 150 mg b.i.d., was administered concurrently.

Carcinogenesis, Mutagenesis, Impairment of Fertility—A two-year oral carcinogenicity study in rats with doses as high as 500 mg/kg/day (about 80 times the recommended daily therapeutic dose) showed no evidence of a carcinogenic effect. There was a dose-related increase in the density of enterochromaffin-like (ECL) cells in the gastric oxyntic mucosa. In a two-year study in mice, there was no evidence of a carcinogenic effect in male mice, although hyperplastic nodules of the liver were increased in the high dose males compared to placebo. Female mice given the high dose of Axid (2,000 mg/kg/day, about 330 times the human dose) showed marginally statistically significant increases in hepatic carcinoma and hepatic nodular hyperplasia with no numerical increase seen in any of the other dose groups. The rate of hepatic carcinoma in the high dose animals was within the historical control limits seen for the strain of mice used. The female mice were given a dose larger than the maximum tolerated dose, as indicated by excessive (30%) weight decrement

compared to concurrent controls, and evidence of mild liver injury (transaminase elevations). The occurrence of a marginal finding at high dose only in animals given an excessive, and somewhat hepatotoxic dose, with no evidence of a carcinogenic effect in rats, male mice, and female mice (given up to 360 mg/kg/day, about 60 times the human dose), and a negative mutagenicity battery is not considered evidence of a carcinogenic potential for Axid.

Axid was not mutagenic in a battery of tests performed to evaluate its potential genetic toxicity, including bacterial mutation tests, unscheduled DNA synthesis, sister chromatid exchange, and the mouse lymphoma assay.

In a two-generation, perinatal and postnatal, fertility study in rats, doses of nizatidine up to 650 mg/kg/day produced no adverse effects on the reproductive performance of parental animals or their progeny.

Pregnancy—Teratogenic Effects—Pregnancy Category C—Oral reproduction studies in rats at doses up to 300 times the human dose, and in Dutch Belted rabbits at doses up to 55 times the human dose, revealed no evidence of impaired fertility or teratogenic effect, but, at a dose equivalent to 300 times the human dose, treated rabbits had abortions, decreased number of live fetuses, and depressed fetal weights. On intravenous administration to pregnant New Zealand White rabbits, nizatidine at 20 mg/kg produced cardiac enlargement, coarctation of the aortic arch, and cutaneous edema in one fetus and at 50 mg/kg it produced ventricular anomaly, distended abdomen, spina bifida, hydrocephaly, and enlarged heart in one fetus. There are, however, no adequate and well-controlled studies in pregnant women. It is also not known whether nizatidine can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Nizatidine should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers—Nizatidine is secreted and concentrated in the milk of lactating rats. Pups reared by treated lactating rats had depressed growth rates. Although no studies have been conducted in lactating women, nizatidine is assumed to be secreted in human milk, and caution should be exercised when nizatidine is administered to nursing mothers.

Pediatric Use—Safety and effectiveness in children have not been established. Use in Elderly Patients—Ulcer healing rates in elderly patients are similar to those in younger age groups. The incidence rates of adverse events and laboratory test abnormalities are also similar to those seen in other age groups. Age alone may not be an important factor in the disposition of nizatidine. Elderly patients may have reduced renal function.

Adverse Reactions: Clinical trials of nizatidine included almost 5,000 patients given nizatidine in studies of varying durations. Domestic placebo-controlled trials included over 1,900 patients given nizatidine and over 1,300 given placebo. Among the more common adverse events in the domestic placebo-controlled trials, sweating (1% vs 0.2%), urticaria (0.5% vs <0.01%), and somnolence (2.4% vs 1.3%) were significantly more common in the nizatidine group. A variety of less common events was also reported; it was not possible to

determine whether these were caused by nizatidine.

Hepatic—Hepatocellular injury, evidenced by elevated liver enzyme tests (SGOT [AST], SGPT [ALT], or alkaline phosphatase), occurred in some patients possibly or probably related to nizatidine. In some cases, there was marked elevation of SGOT, SGPT enzymes (greater than 500 IU/L), and in a single instance, SGPT was greater than 2,000 IU/L. The overall rate of occurrences of elevated liver enzymes and elevations to three times the upper limit of normal, however, did not significantly differ from the rate of liver enzyme abnormalities in placebo-treated patients. All abnormalities were reversible after discontinuation of Axid.

Cardiovascular—In clinical pharmacology studies, short episodes of asymptomatic ventricular tachycardia occurred in two individuals administered Axid and in three untreated subjects.

Endocrine—Clinical pharmacology studies and controlled clinical trials showed no evidence of antiandrogenic activity due to Axid. Impotence and decreased libido were reported with equal frequency by patients who received Axid and by those given placebo. Rare reports of gynecomastia occurred.

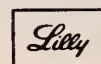
Hematologic—Fatal thrombocytopenia was reported in a patient who was treated with Axid and another H_2 -receptor antagonist. On previous occasions, this patient had experienced thrombocytopenia while taking other drugs. Integumentary—Sweating and urticaria were reported significantly more frequently in nizatidine than in placebo patients. Rash and exfoliative dermatitis were also reported.

Other—Hyperuricemia unassociated with gout or nephrolithiasis was reported.

Overdosage: There is little clinical experience with overdosage of Axid in humans. If overdosage occurs, use of activated charcoal, emesis, or lavage should be considered along with clinical monitoring and supportive therapy. Renal dialysis for four to six hours increased plasma clearance by approximately 84%.

Test animals that received large doses of nizatidine have exhibited cholinergic-type effects, including lacrimation, salivation, emesis, miosis, and diarrhea. Single oral doses of 800 mg/kg in dogs and of 1,200 mg/kg in monkeys were not lethal. Intravenous LD_{50} values in the rat and mouse were 301 mg/kg and 232 mg/kg respectively. PV 2091 AMP [041288]

Axid[®] (nizatidine, Lilly)



Eli Lilly and Company
Indianapolis, Indiana
46285

NZ-2903-B-849356

© 1988, ELI LILLY AND COMPANY

Axid[®] (nizatidine, Lilly)

NEWSLETTER

June 1988

Dear Doctor:

The techniques used to help smokers quit don't appear to matter as much as the amount and variety of personalized advice and support patients receive from physicians in helping them kick the habit, concludes a study in the May 20 JAMA. The U. S. Preventive Services Task Force study urges physicians to use a variety of techniques, noting that the most effective interventions employed more than one modality for motivating behavior change.

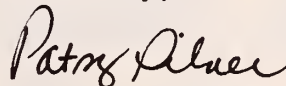
A related article in the same issue of JAMA reports that the drug clonidine may help smokers to quit by reducing their craving for cigarettes. In a four-week placebo-controlled trial involving 71 heavy smokers, the success rate for smokers taking clonidine was more than twice the rate for placebo-treated smokers.

An accompanying editorial on smoking intervention calls for development of a coordinated national strategy for expanding physicians' participation in the campaign for a smoke-free society. Ronald M. Davis, M.D., of the Centers for Disease Control, Rockville, Maryland, says, "Unfortunately, data suggest that physicians as a group may not be doing all they could to encourage cessation among patients who smoke." He called for medical societies, voluntary health organizations, public health agencies, and other groups to better coordinate their activities to avoid duplication of efforts and to mobilize a medical assault on smoking.

The MSMA Council on Public Information, in its report to the House of Delegates this month, will recommend that the association intensify its efforts toward getting the anti-smoking message out to Mississippi citizens.

Notes...Watch your mail for delivery of MSMA's new pictorial directory, due off the press very soon...Current Procedural Terminology (CPT) 1988 is available now. You may call 1-800-826-6895 to order and charge payment to MasterCard or Visa.

Sincerely,



Patsy Silver
Managing Editor



James Carter graduated from St. Stanislaus as validictorian in 1944 and entered the religious order of the Society of Jesus. Today, Father James Carter is the president of Loyola University, a respected civic and religious leader, as well as a noted writer and instructor in the field of science.

"The Brothers taught us a blend of simple piety and manly character which is the trademark of a Stanislaus education."

To the Brothers of the Sacred Heart, every student is a potential leader. And giving him the proper example—spiritual, intellectual and moral—is our mission at St. Stanislaus.

SAINT STANISLAUS
BOARDING SCHOOL GRADES 6-12
SUMMER CAMP AGES 9-14
304 South Beach Blvd. Bay St. Louis, MS 39520



St. Stanislaus helps build leaders.

FOR A FREE BROCHURE CALL THE DIRECTOR OF ADMISSIONS—(601) 467-9057.

DATELINE

Ethics Commission Ignored Law

Jackson, MS - A Hinds County Chancery Court has struck down a MS Ethics Commission ruling to prohibit physicians from serving on governing boards of public hospitals where they have staff privileges. MSMA challenged the ruling in a lawsuit, and the Court stated the Commission "had ignored contrary pronouncements from the MS Supreme Court, MS Attorney General, and the great weight of authority from other jurisdictions."

How to Understand And Explain Medicare

Jackson, MS - MSMA members received a copy of "Medicare - What It Will and Will Not Pay For" earlier this month. Physicians and their appropriate office personnel may find it extremely helpful in discussing Medicare requirements with patients. Limited single copies are available from MSMA. Copies of the booklet are also being furnished by MSMA to local chapters of the AARP and the MS Council on Aging.

"Senior Care" Will Start This Month

Jackson, MS - "Senior Care" will get underway this month in the Golden Triangle and North Delta areas of the state. The MSMA/MS Council on Aging program will identify low income Medicare recipients and physician volunteers who will accept Medicare assignment for the medically needy elderly. Many physicians have already volunteered for the program, which will be expanded statewide at a later date.

MSMA Delegates to AMA Win Membership Award

Jackson, MS - When MSMA's AMA delegates return from the annual meeting in Chicago this month, they will be sporting blazers presented to them as successful participants in the AMA's Outreach Program to recruit new AMA members. The MSMA delegation recruited over 60 new AMA members. It is the first time in the Outreach Program's history that an entire state delegation has received the award.

Trans-Scan Now In Use At University Medical Center

Jackson, MS - Some, but not all, of the need for angiograms has been eliminated at UMC, where neurosurgeons are using a new transcranial, three dimensional doppler scanner. The Trans-Scan is one of only seven in the U.S. According to neurosurgery department chairman Dr. Robert Smith, the scanner not only saves time and money but also eliminates patient discomfort and sometimes, the need for additional tests.

WE'RE PLEASED TO ANNOUNCE WE'VE CORRECTED OUR IMAGE PROBLEM.

As a major component of Hinds General Hospital's 12,000 square-foot Imaging & Outpatient Center, our General Electric Signa Magnetic Resonance Imaging system represents our continuing commitment to offering the best available equipment and facilities for Hinds General physicians.

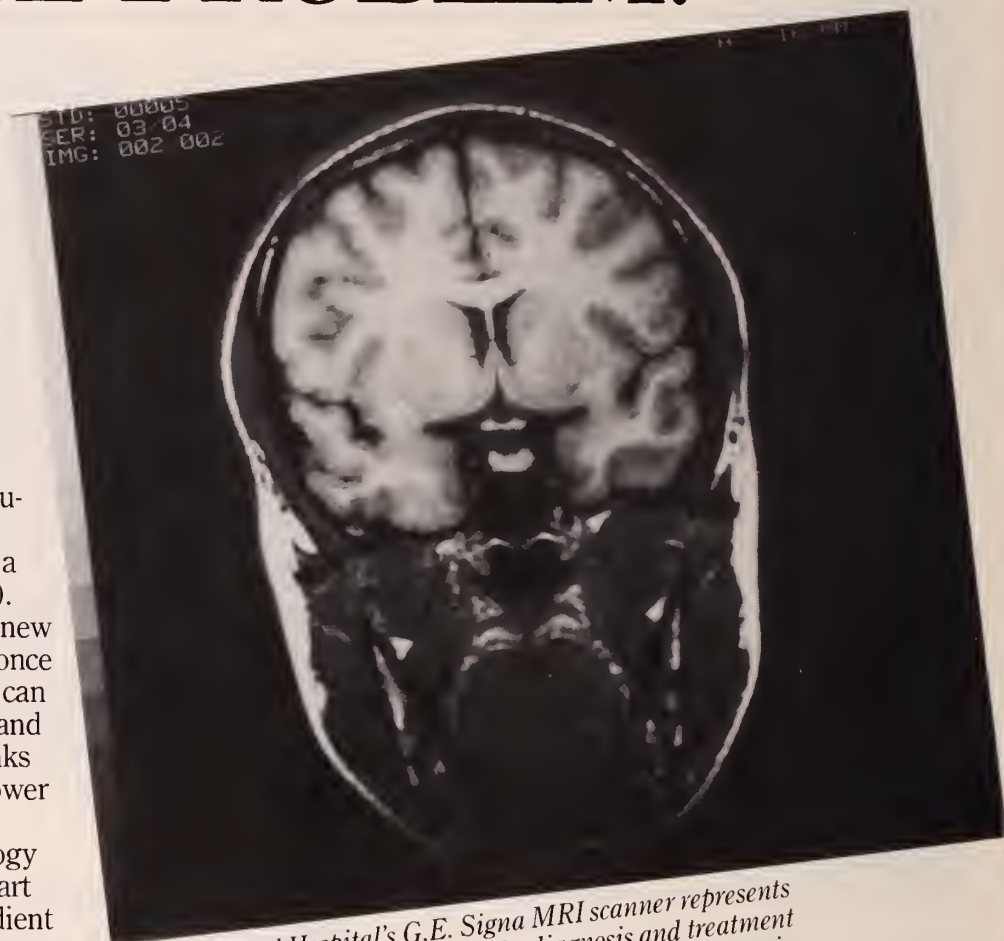
Shortly after installing our MRI scanner, a problem with fluctuating electrical power forced us to shut it down until we could install a UPS (uninterrupted power source).

Our recent investment in this new UPS unit has solved the problem once and for all. Consequently, we now can offer excellent quality MRI scans and reduced patient waiting time, thanks to our improved, pure electrical power supply.

And that's what the Technology of Caring is all about: state-of-the-art medicine and a very special ingredient called HindsCare.SM

Additional HGH MRI benefits include:

- Convenient FREE parking
- Same-day written results
- Copies of film upon request — NO CHARGE
- Out-of-town referrals welcomed



Hinds General Hospital's G.E. Signa MRI scanner represents the pinnacle of imaging capability for diagnosis and treatment of disease. It's one more example of our commitment to remain at the forefront of medical technology.

HINDS GENERAL

H O S P I T A L

The Technology Of Caring.SM

1850 Chadwick Drive/Jackson, MS 39204/601-376-1000

©1988 Hinds General Hospital. All rights reserved.

Counsel to Authors

THE JOURNAL welcomes manuscripts which should be submitted to the Editors at 735 Riverside Drive, Jackson, MS 39216, in original and at least one duplicate copy. They must be typewritten double spaced on 8½ by 11-inch white paper. **Brief manuscripts (about 2,500 words or 8 pages) will be given preference over longer articles.**

The author is responsible for all statements made in his work, including changes made by the manuscript editor. Manuscripts are received with the understanding that they are not under simultaneous consideration by any other publication and have not been previously published. All manuscripts will be acknowledged, and while those rejected are generally returned to the author, the JOURNAL is not responsible in event of loss. Manuscripts accepted for publication become the property of the JOURNAL and are copyrighted by the association when published. They may not be published elsewhere without written release and permission from both the JOURNAL and the author.

All copy must be double spaced, including legends, footnotes, and references. Generous margins at the top, bottom, and on both sides of the page should be allowed. Each page after the title page should be consecutively numbered and carry a running head identifying the paper and author.

Titles should be short, specific, and clear. Ordinarily, a title should not exceed 80 characters, including punctuation.

References should be limited to a maximum of 10. If there are more than 10, the references will be omitted and a notation made to write the author for a complete list. Textbooks, personal communications, and unpublished data may not be cited as references. References must include names of authors, complete title cited, name of journal or book spelled out or abbreviated according to the *Index Medicus*, volume number, first and last page numbers, month, date (if published more frequently than monthly), and year. References should be arranged according to order listed in the text and must be numbered consecutively.

Manuscripts accepted for publication are subject to copy editing. Authors will receive galley proof prior to publication. Galley proof is only for correction of errors, and text changes

may not be made. The galley proof should be returned by the author within 48 hours from receipt, and no further changes may be made.

Illustrations consist of all material which cannot be set into type such as photographs, line drawings, graphs, charts, and tracings. Illustrations should be submitted separately from text copy. Figures and drawings should be professionally prepared with black ink on white paper. Photographs should be of high resolution, unmounted, untrimmed, glossy prints. Each must be clearly identified. No charges are made to authors for up to four illustration engravings. More are not permitted unless voted on by two editors and extra costs must be absorbed by the author.

Illustrations must be numbered and cited in the text. Legends, not exceeding 40 words and preferably shorter, must accompany each illustration, typed double spaced on separate sheets. The following information should appear on a gummed label affixed to the back of each illustration: Figure number, manuscript title, author's name, and arrow indicating top of the illustration.

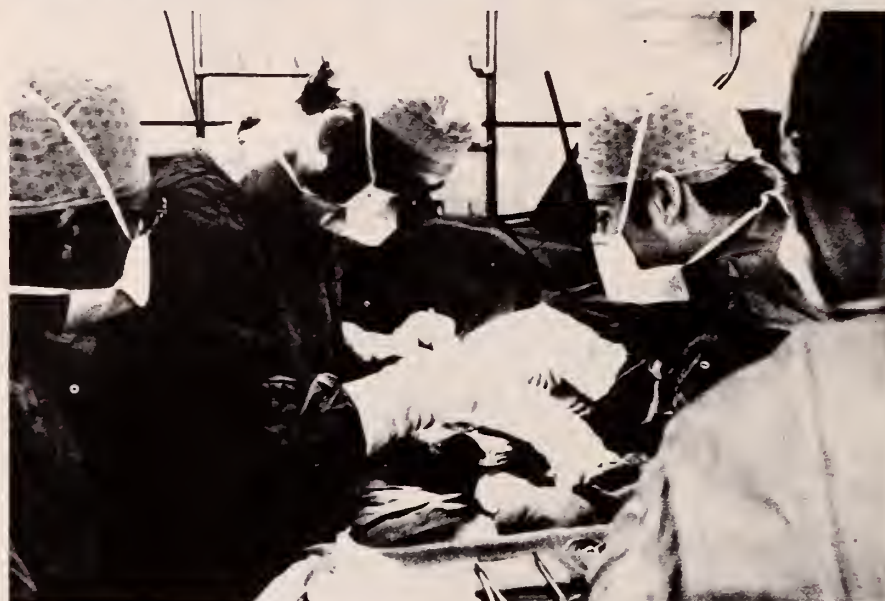
In photographs in which there is any possibility of personal identification, an acceptable legal release must accompany the material.

A thesis summary of 75 to 100 words must accompany each manuscript.

Reprints may be obtained at cost plus shipping charges from the association and **should be ordered prior to publication.** The JOURNAL reserves the right to decline any manuscript. Authors should avoid placing subheads in the text, and the Editors reserve the prerogative of writing and inserting subheads according to JOURNAL style. — *The Editors.*

In addition, in view of *The Copyright Revision Act of 1976*, effective Jan. 1, 1978, transmittal letters to the editor should contain the following language: "In consideration of the Mississippi State Medical Association's taking action in reviewing and editing my submission, the author(s) undersigned hereby transfers, assigns, or otherwise conveys all copyright ownership to the MSMA in the event that such work is published by the MSMA." We regret that transmittal letters not containing the foregoing language signed by all authors of the submission will necessitate delay in review of the manuscript. — *The Editors.*

THE ARMY RESERVE OFFERS NEW FINANCIAL INCENTIVES FOR RESIDENTS.



If you are a resident in Anesthesiology or Surgery*, the Army Reserve has a new and exciting opportunity for you. The new Specialized Training Assistance Program will provide you with financial incentives while you're training in one of these specialties.

Here's how the program can work for you. If you qualify, you may be selected to participate in the Specialized Training Program. You'll serve in a local Army Reserve medical unit with flexible scheduling so it won't interfere with your residency

training, and in addition to your regular monthly Reserve pay, you'll receive a stipend of \$644 a month.

You'll also have the opportunity to practice your specialty for two weeks a year at one of the Army's prestigious Medical Centers.

Find out more about the Army Reserve's new Specialized Training Assistance Program.

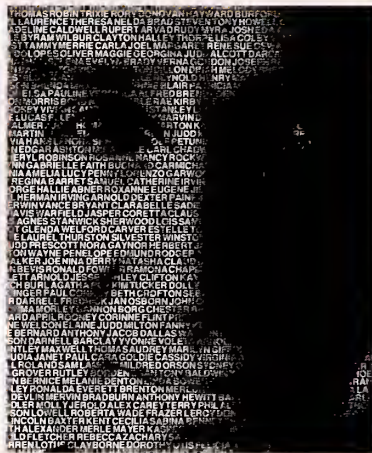
Call or write your US Army Medical Department Reserve Personnel Counselor:

**ARMY RESERVE MEDICINE
2100 6TH AVE. SOUTH
SUITE 303
BIRMINGHAM, AL 35205
(205) 930-9719 COLLECT**

* General, Orthopaedic, Neuro, Colon/Rectal, Cardio/Thoracic, Pediatric, Peripheral/Vascular, or Plastic Surgery.

ARMY RESERVE MEDICINE. BE ALL YOU CAN BE.

(PROPRANOLOL HCl)
LONG ACTING CAPSULES 60, 80, 120, 160 mg



JOHN NIGEL ARNOLD
ARCY GRIFFITH AL
AISY TRINA NADIA
NGELA WILSON HIL
ILLIE ORLANDO BA
ENE SUE OSWALD C
ELENA EVELYN BR
ERRY TURNER PAGE
EFFREY BREWSTER
OBLE RAE KIRBY IRE
ROOKE LUCAS ELLEY
ECIL SUZANNA THOM
AMERON HASKEL DON
ANCY ROCKWELL FREL
ANIA AMELIA LUCY PEN
PENCER BURGESS NATI
ARAH LIONEL TYSON SE
ARFIELD JASPER CORET
AUL ROBERT ED CHARLIE
ILVESTER WINSTON BUCK
RISTEN BURTON WAYNE PE
ART YOLANDA HARDEN MUI
AY GERALD WHITNEY REDFO
INGER PAUL CONROY BETH C
RADWELL GENE HOBART CH
IRGIL SELMA MASON ROSAM
NTHONY TOM JACOB DALLAS
ARWIN GWENDOLEN BERKEL
EROME HUBERT MABEL MILES
GAN TONY BALDWIN YVETTE R
LESLEY RONALDA EVERETT BE
EATHNOLAN ARVIN CHARLOTTE
HASE STUART DEWEY DREW CA
IERLE MAYER KASPER COLETTE
OYD AMY DARREN LOTUS CLAYE
OLLY JOHN MARC RYLAN COLLIER
ERA FREIDA LUIS TOM DAVIS KAREN
ARISSA LEAH MURIEL LOGAN TYRONE
EIGH NED TOM AMANDA THOMAS
BBOOT WENDY ELVIS HAGEN PE
JAMIN KLAUS FAYE JODY VALONIA
ALCOLM ANDREW NYDIA RAY
ARVEY ROBERT KRISTEN JIM
ASEY ORLANDO PIA WARREN EL
HERESA JOE ANTHONY WEBB
IERLIN GARNER ALLAN ALICE
AYNOR TRINA LLOYD ARNOLD
ISA HILLEL ATWOOD JOY BURT
ICTORIA JOHN TONIA FIONA
ADFOR DORA BROOKE PAYNE
ORRIS EL VIRAL ROY WARTON
ALKER BRAD MERVIN SYDNEY
OYLE CHERIE SUE JOEL TILLIE
JARGARET MAGGIE MARVIN
HRISTOPHER BRENDA WALTER
ERNICE CURTIS VERONICA BILL
AY OLIVER BLANCHE DARCIE LESL
AULINE MILLARD RODNEY GRACE
OBERT KRISTEN BURTON CAMPBELL
REND CARLOS MARIANNE SANDER
ATHANIA JUDD GARFIELD HENRY
RYAN RANDOLPH VIVIAN LEWIS
LINT BOWIE ALEXANDRA CURT HASKEL
OSEMARY ROLAND AUBIN MARGA
RADSHAW RILEY JOE BERNIE PHIL
UNTLEY DAVID ALISON THELMA
NNETTE PRESCOTT LENORE JACK
LEXIS LINDA ORSON THADDEUS
UIS CARY FRED LEE LAUREL
VINSTON JOLIE SIGMUND WILTON
ACHEL JEROLD JUDITH HOGAN
TEWART MERLE BARLOW LAWSON
YRONE CLIFTON NORMAN BURNE
IM KIM NINA BENNETT SEBASTIAN
ULLIVAN BUCKLEY BRANDON MAR
ONI ARTHUR LINCOLN MASON AL
ICK ALEXANDER GANNON DREW
OLDIE SHARON MILTON MARC
AUL GUNTHER FELIX RALPH NATH
OLLY LAVERNE LEIGH SAL DOMINIC
UTLEY GARLAND VAL DIANE BRUCE
YNNIE ELVIS JUDD FLETCHER FELICIA
AYE LEIGH ELMO LOGAN BEAMAN
RNOLD BERNARD JOHN JOSEPH
IERLIN BRUNO ANDREA ROYDEN

JOHN NIGEL ARNOLD
ARCY GRIFFITH AL
AISY TRINA NADIA
NGELA WILSON HIL
ILLIE ORLANDO BA
ENE SUE OSWALD C
ELENA EVELYN BR
ERRY TURNER PAGE
EFFREY BREWSTER
OBLE RAE KIRBY IRE
ROOKE LUCAS ELLEY
ECIL SUZANNA THOM
AMERON HASKEL DON
ANCY ROCKWELL FREL
ANIA AMELIA LUCY PEN
PENCER BURGESS NATI
ARAH LIONEL TYSON SE
ARFIELD JASPER CORET
AUL ROBERT ED CHARLIE
ILVESTER WINSTON BUCK
RISTEN BURTON WAYNE PE
ART YOLANDA HARDEN MUI
AY GERALD WHITNEY REDFO
INGER PAUL CONROY BETH C
RADWELL GENE HOBART CH
IRGIL SELMA MASON ROSAM
NTHONY TOM JACOB DALLAS
ARWIN GWENDOLEN BERKEL
EROME HUBERT MABEL MILES
GAN TONY BALDWIN YVETTE R
LESLEY RONALDA EVERETT BE
EATHNOLAN ARVIN CHARLOTTE
HASE STUART DEWEY DREW CA
IERLE MAYER KASPER COLETTE
OYD AMY DARREN LOTUS CLAYE
OLLY JOHN MARC RYLAN COLLIER
ERA FREIDA LUIS TOM DAVIS KAREN
ARISSA LEAH MURIEL LOGAN TYRONE
EIGH NED TOM AMANDA THOMAS
BBOOT WENDY ELVIS HAGEN PE
JAMIN KLAUS FAYE JODY VALONIA
ALCOLM ANDREW NYDIA RAY
ARVEY ROBERT KRISTEN JIM
ASEY ORLANDO PIA WARREN EL
HERESA JOE ANTHONY WEBB
IERLIN GARNER ALLAN ALICE
AYNOR TRINA LLOYD ARNOLD
ISA HILLEL ATWOOD JOY BURT
ICTORIA JOHN TONIA FIONA
ADFOR DORA BROOKE PAYNE
ORRIS EL VIRAL ROY WARTON
ALKER BRAD MERVIN SYDNEY
OYLE CHERIE SUE JOEL TILLIE
JARGARET MAGGIE MARVIN
HRISTOPHER BRENDA WALTER
ERNICE CURTIS VERONICA BILL
AY OLIVER BLANCHE DARCIE LESL
AULINE MILLARD RODNEY GRACE
OBERT KRISTEN BURTON CAMPBELL
REND CARLOS MARIANNE SANDER
ATHANIA JUDD GARFIELD HENRY
RYAN RANDOLPH VIVIAN LEWIS
LINT BOWIE ALEXANDRA CURT HASKEL
OSEMARY ROLAND AUBIN MARGA
RADSHAW RILEY JOE BERNIE PHIL
UNTLEY DAVID ALISON THELMA
NNETTE PRESCOTT LENORE JACK
LEXIS LINDA ORSON THADDEUS
UIS CARY FRED LEE LAUREL
VINSTON JOLIE SIGMUND WILTON
ACHEL JEROLD JUDITH HOGAN
TEWART MERLE BARLOW LAWSON
YRONE CLIFTON NORMAN BURNE
IM KIM NINA BENNETT SEBASTIAN
ULLIVAN BUCKLEY BRANDON MAR
ONI ARTHUR LINCOLN MASON AL
ICK ALEXANDER GANNON DREW
OLDIE SHARON MILTON MARC
AUL GUNTHER FELIX RALPH NATH
OLLY LAVERNE LEIGH SAL DOMINIC
UTLEY GARLAND VAL DIANE BRUCE
YNNIE ELVIS JUDD FLETCHER FELICIA
AYE LEIGH ELMO LOGAN BEAMAN
RNOLD BERNARD JOHN JOSEPH
IERLIN BRUNO ANDREA ROYDEN

JOHN NIGEL ARNOLD
ARCY GRIFFITH AL
AISY TRINA NADIA
NGELA WILSON HIL
ILLIE ORLANDO BA
ENE SUE OSWALD C
ELENA EVELYN BR
ERRY TURNER PAGE
EFFREY BREWSTER
OBLE RAE KIRBY IRE
ROOKE LUCAS ELLEY
ECIL SUZANNA THOM
AMERON HASKEL DON
ANCY ROCKWELL FREL
ANIA AMELIA LUCY PEN
PENCER BURGESS NATI
ARAH LIONEL TYSON SE
ARFIELD JASPER CORET
AUL ROBERT ED CHARLIE
ILVESTER WINSTON BUCK
RISTEN BURTON WAYNE PE
ART YOLANDA HARDEN MUI
AY GERALD WHITNEY REDFO
INGER PAUL CONROY BETH C
RADWELL GENE HOBART CH
IRGIL SELMA MASON ROSAM
NTHONY TOM JACOB DALLAS
ARWIN GWENDOLEN BERKEL
EROME HUBERT MABEL MILES
GAN TONY BALDWIN YVETTE R
LESLEY RONALDA EVERETT BE
EATHNOLAN ARVIN CHARLOTTE
HASE STUART DEWEY DREW CA
IERLE MAYER KASPER COLETTE
OYD AMY DARREN LOTUS CLAYE
OLLY JOHN MARC RYLAN COLLIER
ERA FREIDA LUIS TOM DAVIS KAREN
ARISSA LEAH MURIEL LOGAN TYRONE
EIGH NED TOM AMANDA THOMAS
BBOOT WENDY ELVIS HAGEN PE
JAMIN KLAUS FAYE JODY VALONIA
ALCOLM ANDREW NYDIA RAY
ARVEY ROBERT KRISTEN JIM
ASEY ORLANDO PIA WARREN EL
HERESA JOE ANTHONY WEBB
IERLIN GARNER ALLAN ALICE
AYNOR TRINA LLOYD ARNOLD
ISA HILLEL ATWOOD JOY BURT
ICTORIA JOHN TONIA FIONA
ADFOR DORA BROOKE PAYNE
ORRIS EL VIRAL ROY WARTON
ALKER BRAD MERVIN SYDNEY
OYLE CHERIE SUE JOEL TILLIE
JARGARET MAGGIE MARVIN
HRISTOPHER BRENDA WALTER
ERNICE CURTIS VERONICA BILL
AY OLIVER BLANCHE DARCIE LESL
AULINE MILLARD RODNEY GRACE
OBERT KRISTEN BURTON CAMPBELL
REND CARLOS MARIANNE SANDER
ATHANIA JUDD GARFIELD HENRY
RYAN RANDOLPH VIVIAN LEWIS
LINT BOWIE ALEXANDRA CURT HASKEL
OSEMARY ROLAND AUBIN MARGA
RADSHAW RILEY JOE BERNIE PHIL
UNTLEY DAVID ALISON THELMA
NNETTE PRESCOTT LENORE JACK
LEXIS LINDA ORSON THADDEUS
UIS CARY FRED LEE LAUREL
VINSTON JOLIE SIGMUND WILTON
ACHEL JEROLD JUDITH HOGAN
TEWART MERLE BARLOW LAWSON
YRONE CLIFTON NORMAN BURNE
IM KIM NINA BENNETT SEBASTIAN
ULLIVAN BUCKLEY BRANDON MAR
ONI ARTHUR LINCOLN MASON AL
ICK ALEXANDER GANNON DREW
OLDIE SHARON MILTON MARC
AUL GUNTHER FELIX RALPH NATH
OLLY LAVERNE LEIGH SAL DOMINIC
UTLEY GARLAND VAL DIANE BRUCE
YNNIE ELVIS JUDD FLETCHER FELICIA
AYE LEIGH ELMO LOGAN BEAMAN
RNOLD BERNARD JOHN JOSEPH
IERLIN BRUNO ANDREA ROYDEN

JOHN NIGEL ARNOLD
ARCY GRIFFITH AL
AISY TRINA NADIA
NGELA WILSON HIL
ILLIE ORLANDO BA
ENE SUE OSWALD C
ELENA EVELYN BR
ERRY TURNER PAGE
EFFREY BREWSTER
OBLE RAE KIRBY IRE
ROOKE LUCAS ELLEY
ECIL SUZANNA THOM
AMERON HASKEL DON
ANCY ROCKWELL FREL
ANIA AMELIA LUCY PEN
PENCER BURGESS NATI
ARAH LIONEL TYSON SE
ARFIELD JASPER CORET
AUL ROBERT ED CHARLIE
ILVESTER WINSTON BUCK
RISTEN BURTON WAYNE PE
ART YOLANDA HARDEN MUI
AY GERALD WHITNEY REDFO
INGER PAUL CONROY BETH C
RADWELL GENE HOBART CH
IRGIL SELMA MASON ROSAM
NTHONY TOM JACOB DALLAS
ARWIN GWENDOLEN BERKEL
EROME HUBERT MABEL MILES
GAN TONY BALDWIN YVETTE R
LESLEY RONALDA EVERETT BE
EATHNOLAN ARVIN CHARLOTTE
HASE STUART DEWEY DREW CA
IERLE MAYER KASPER COLETTE
OYD AMY DARREN LOTUS CLAYE
OLLY JOHN MARC RYLAN COLLIER
ERA FREIDA LUIS TOM DAVIS KAREN
ARISSA LEAH MURIEL LOGAN TYRONE
EIGH NED TOM AMANDA THOMAS
BBOOT WENDY ELVIS HAGEN PE
JAMIN KLAUS FAYE JODY VALONIA
ALCOLM ANDREW NYDIA RAY
ARVEY ROBERT KRISTEN JIM
ASEY ORLANDO PIA WARREN EL
HERESA JOE ANTHONY WEBB
IERLIN GARNER ALLAN ALICE
AYNOR TRINA LLOYD ARNOLD
ISA HILLEL ATWOOD JOY BURT
ICTORIA JOHN TONIA FIONA
ADFOR DORA BROOKE PAYNE
ORRIS EL VIRAL ROY WARTON
ALKER BRAD MERVIN SYDNEY
OYLE CHERIE SUE JOEL TILLIE
JARGARET MAGGIE MARVIN
HRISTOPHER BRENDA WALTER
ERNICE CURTIS VERONICA BILL
AY OLIVER BLANCHE DARCIE LESL
AULINE MILLARD RODNEY GRACE
OBERT KRISTEN BURTON CAMPBELL
REND CARLOS MARIANNE SANDER
ATHANIA JUDD GARFIELD HENRY
RYAN RANDOLPH VIVIAN LEWIS
LINT BOWIE ALEXANDRA CURT HASKEL
OSEMARY ROLAND AUBIN MARGA
RADSHAW RILEY JOE BERNIE PHIL
UNTLEY DAVID ALISON THELMA
NNETTE PRESCOTT LENORE JACK
LEXIS LINDA ORSON THADDEUS
UIS CARY FRED LEE LAUREL
VINSTON JOLIE SIGMUND WILTON
ACHEL JEROLD JUDITH HOGAN
TEWART MERLE BARLOW LAWSON
YRONE CLIFTON NORMAN BURNE
IM KIM NINA BENNETT SEBASTIAN
ULLIVAN BUCKLEY BRANDON MAR
ONI ARTHUR LINCOLN MASON AL
ICK ALEXANDER GANNON DREW
OLDIE SHARON MILTON MARC
AUL GUNTHER FELIX RALPH NATH
OLLY LAVERNE LEIGH SAL DOMINIC
UTLEY GARLAND VAL DIANE BRUCE
YNNIE ELVIS JUDD FLETCHER FELICIA
AYE LEIGH ELMO LOGAN BEAMAN
RNOLD BERNARD JOHN JOSEPH
IERLIN BRUNO ANDREA ROYDEN

JOHN NIGEL ARNOLD
ARCY GRIFFITH AL
AISY TRINA NADIA
NGELA WILSON HIL
ILLIE ORLANDO BA
ENE SUE OSWALD C
ELENA EVELYN BR
ERRY TURNER PAGE
EFFREY BREWSTER
OBLE RAE KIRBY IRE
ROOKE LUCAS ELLEY
ECIL SUZANNA THOM
AMERON HASKEL DON
ANCY ROCKWELL FREL
ANIA AMELIA LUCY PEN
PENCER BURGESS NATI
ARAH LIONEL TYSON SE
ARFIELD JASPER CORET
AUL ROBERT ED CHARLIE
ILVESTER WINSTON BUCK

ON

...like the more than one million patients who have received **INDERAL® LA**.

In a recent survey, 4,120 participating physicians gave us their views¹ on **INDERAL LA** in the treatment of hypertension, angina and migraine.

INDERAL LA is their preferred beta blocker

...of the nearly three out of four physicians responding to the questionnaire, an impressive 97% rated **INDERAL LA** good to excellent for overall performance. Virtually all cited efficacy, tolerability, long-term cardiovascular protection and once-daily convenience as important factors in their choosing to prescribe **INDERAL LA**.

INDERAL LA promotes patient compliance

...Virtually every responding physician rated patient satisfaction with **INDERAL LA** to be as good as, or better than, other beta blockers.

Like conventional **INDERAL** Tablets, **INDERAL LA** should not be used in the presence of congestive heart failure, sinus bradycardia, cardiogenic shock, heart block greater than first degree and bronchial asthma.

ONCE-DAILY
INDERAL® LA
 (PROPRANOLOL HCl)
 LONG ACTING CAPSULES
 60, 80, 120, 160 mg

The one you know best keeps looking better

Please see next page for brief summary of prescribing information.

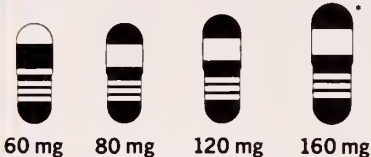
ROBERT KRISTEN ARNOLD
 MARCUS RHODA JEREMY
 LIAN FLOYD ELLIOTT HAR
 MYRA JOSH EDWARD
 AMY MERRIE CARLA JO
 LEY IRISS STEPHANIE CHA
 JESSICA BERNARD MA
 BLAIR PATRICIA MIL
 ANNON MORRIS BOND
 AHAM ELEANORE GIN
 MORE CLAY PEARCE G
 NICOLE PETUNIA HA
 LEE CHERYL ROBINS
 VIN HUNTER NEVIN
 TLAND COLEMAN
 ER PAINE JANE SH
 AWLEY KATHERINE
 IRMA MYLES JUL
 INETTE LAUREL TH
 RANDALL PHYLLIS
 RION JULIUS GLEN
 JESSE ASHLEY CLIF
 ANCHE ROBIN JACQ
 RK NOAH STEWART
 ORINNE FLINT PRESL
 RON NORTON JULIE
 SHIRLEY HARPER PE
 OLDIE CASSIDY VIRGI
 LYDIA GROVER RUTL
 SYBIL NOEL HUMPHR
 L BILL LILLIAN MARLE
 ADE FRAZER LEROY DO
 SMEREDITH ALEXAND
 ESMOND TONY HILAR
 ERTA LEONORA BAR
 ENNIS CULLEN TABIT
 RENDAN GUNTHERE
 MARIO JAYNE MELIS
 SPER VITO NICHOLA
 Y JONATHAN SALLY
 ON SEAN WALDEN RO
 RT DIANE JENNIFER LE
 LLEEN DWIGHT MITCH
 INGRID CHANNING LIN
 ANSON ANDREW GALL
 ER ROXANNE ASHBY HAR
 A TRIXIE RORY BAYARD CH
 JOSEPH PAGE JULIE REX RE
 LEONA RUDY MARCUS SLOAN
 RADONNA CRAIG ANNE EL MER
 HAM ADELINE HALLEY MIL FORD DE
 ON PRISCILLA WILSON RUPERT HAR
 ATH STEVEN BRONSON JEAN PETER DIA
 INE LORNA ROBERTA NOBLE TOM SABIN
 T MIA BARTLETT BEAU DINAH JIM FRITZ D
 INE CECILIA TAMARA BEN ROSABELLE JU
 LE SIMPSON BERNARD ERROL CORETTA
 VERETT MARGO LENA LORENZO CLIFF R
 N MARTIN THOMAS TONY COLEMAN LUCI
 DEN REBECCA COURTNEY NICOLE BREWS
 ER RHONDA TURNER MADELINE ELL EN MO
 OWLER JANET TONY THOMAS ROBERTSO
 T ROBIN HARDEN BRETT NEIL BORDEN NO
 WATSON GEORGIA BARCLAY ODESSA
 ADWICK APRIL TODD ARDEN LAUR
 MABEL SHERWIN PATIDA GINA
 ARD ARNOLD HILLIARD SILVES
 ORA DONAHUE EGAN MURRA
 AMDEN EDNA MILES ALBER
 RUSSEL AUDREY ELI DEWE
 NOLD TONY WILFRED CL
 DAM TYSON LARISSA A
 TON LIBBY OSCAR PH
 OYD PHOEBE ARCH
 IS FRANKLIN LO
 M RENEE CHA
 AN ZELDA
 AS MEGA
 Y CRY
 SHEE

feel like a MILLION



ONCE-DAILY
INDERAL[®] LA
(PROPRANOLOL HCl) LONG ACTING CAPSULES 60, 80, 120, 160 mg

The one you know best
keeps looking better



BRIEF SUMMARY (FOR FULL PRESCRIBING INFORMATION, SEE PACKAGE CIRCULAR.)

INDERAL[®] LA brand of propranolol hydrochloride (Long Acting Capsules)

DESCRIPTION. Inderal LA is formulated to provide a sustained release of propranolol hydrochloride. Inderal LA is available as 60 mg, 80 mg, 120 mg, and 160 mg capsules.

CLINICAL PHARMACOLOGY. Inderal is a nonselective, beta-adrenergic receptor-blocking agent possessing no other autonomic nervous system activity. It specifically competes with beta-adrenergic receptor-stimulating agents for available receptor sites. When access to beta-receptor sites is blocked by Inderal, the chronotropic, inotropic, and vasodilator responses to beta-adrenergic stimulation are decreased proportionately.

Inderal LA Capsules (60, 80, 120, and 160 mg) release propranolol HCl at a controlled and predictable rate. Peak blood levels following dosing with Inderal LA occur at about 6 hours and the apparent plasma half-life is about 10 hours. When measured at steady state over a 24-hour period the areas under the propranolol plasma concentration-time curve (AUCs) for the capsules are approximately 60% to 65% of the AUCs for a comparable divided daily dose of Inderal Tablets. The lower AUCs for the capsules are due to greater hepatic metabolism of propranolol, resulting from the slower rate of absorption of propranolol. Over a twenty-four (24) hour period, blood levels are fairly constant for about twelve (12) hours then decline exponentially.

Inderal LA should not be considered a simple mg-for-mg substitute for conventional propranolol and the blood levels achieved do not match (are lower than) those of two to four times daily dosing with the same dose. When changing to Inderal LA from conventional propranolol, a possible need for retitration upwards should be considered especially to maintain effectiveness at the end of the dosing interval. In most clinical settings, however, such as hypertension or angina where there is little correlation between plasma levels and clinical effect, Inderal LA has been therapeutically equivalent to the same mg dose of conventional Inderal as assessed by 24-hour effects on blood pressure and on 24-hour exercise responses of heart rate, systolic pressure, and rate pressure product. Inderal LA can provide effective beta blockade for a 24-hour period.

INDICATIONS AND USAGE. **Hypertension:** Inderal LA is indicated in the management of hypertension; it may be used alone or used in combination with other antihypertensive agents, particularly a thiazide diuretic. Inderal LA is not indicated in the management of hypertensive emergencies.

Angina Pectoris Due to Coronary Atherosclerosis: Inderal LA is indicated for the long-term management of patients with angina pectoris.

Migraine: Inderal LA is indicated for the prophylaxis of common migraine headache. The efficacy of propranolol in the treatment of a migraine attack that has started has not been established and propranolol is not indicated for such use.

Hypertrophic Subaortic Stenosis: Inderal LA is useful in the management of hypertrophic subaortic stenosis, especially for treatment of exertional or other stress-induced angina, palpitations, and syncope. Inderal LA also improves exercise performance. The effectiveness of propranolol hydrochloride in this disease appears to be due to a reduction of the elevated outflow pressure gradient which is exacerbated by beta-receptor stimulation. Clinical improvement may be temporary.

CONTRAINDICATIONS. Inderal is contraindicated in 1) cardiogenic shock; 2) sinus bradycardia and greater than first-degree block; 3) bronchial asthma; 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with Inderal.

WARNINGS. **CARDIAC FAILURE:** Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or Inderal should be discontinued (gradually, if possible).

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following abrupt discontinuance of Inderal therapy. Therefore, when discontinuance of Inderal is planned, the dosage should be gradually reduced over at least a few weeks, and the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If Inderal therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute Inderal therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

Nonallergic Bronchospasm (eg, chronic bronchitis, emphysema)—PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD IN GENERAL NOT RECEIVE BETA BLOCKERS. Inderal should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

MAJOR SURGERY: The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

INDERAL (propranolol HCl), like other beta blockers, is a competitive inhibitor of beta-receptor agonists and its effects can be reversed by administration of such agents, eg, dobutamine or isoproterenol. However, such patients may be subject to protracted severe hypotension. Difficulty in starting and maintaining the heartbeat has also been reported with beta blockers.

DIABETES AND HYPOGLYCEMIA: Beta blockers should be used with caution in diabetic patients if a beta-blocking agent is required. Beta blockers may mask tachycardia occurring with hypoglycemia, but other manifestations such as dizziness and sweating may not be significantly affected. Following insulin-induced hypoglycemia, propranolol may cause a delay in the recovery of blood glucose to normal levels.

THYROTOXICOSIS: Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol may change thyroid function tests, increasing T₄ and reverse T₃, and decreasing T₃.

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

PRECAUTIONS. GENERAL: Propranolol should be used with caution in patients with impaired hepatic or renal function. Inderal (propranolol HCl) is not indicated for the treatment of hypertensive emergencies.

Beta-adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be told that Inderal may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

CLINICAL LABORATORY TESTS: Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

DRUG INTERACTIONS: Patients receiving catecholamine-depleting drugs such as reserpine should be closely observed if Inderal (propranolol HCl) is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension.

Caution should be exercised when patients receiving a beta blocker are administered a calcium-channel-blocking drug, especially intravenous verapamil, for both agents may depress myocardial contractility or atrioventricular conduction. On rare occasions, the concomitant intravenous use of a beta blocker and verapamil has resulted in serious adverse reactions, especially in patients with severe cardiomyopathy, congestive heart failure, or recent myocardial infarction.

Aluminum hydroxide gel greatly reduces intestinal absorption of propranolol.

Ethanol slows the rate of absorption of propranolol.

Phenyltol, phenobarbital, and rifampin accelerate propranolol clearance.

Chlorpromazine, when used concomitantly with propranolol, results in increased plasma levels of both drugs.

Antipyrine and lidocaine have reduced clearance when used concomitantly with propranolol.

Thyroxine may result in a lower than expected T₃ concentration when used concomitantly with propranolol.

Cimetidine decreases the hepatic metabolism of propranolol, delaying elimination and increasing blood levels.

Theophylline clearance is reduced when used concomitantly with propranolol.

CARCINOGENESIS, MUTAGENESIS, IMPAIRMENT OF FERTILITY: Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

PREGNANCY: Pregnancy Category C. Inderal has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximum recommended human dose.

There are no adequate and well-controlled studies in pregnant women. Inderal should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

NURSING MOTHERS: Inderal is excreted in human milk. Caution should be exercised when Inderal is administered to a nursing woman.

PEDIATRIC USE: Safety and effectiveness in children have not been established.

ADVERSE REACTIONS. Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

Cardiovascular: Bradycardia; congestive heart failure; intensification of AV block; hypotension; paresthesia of hands; thrombocytopenic purpura; arterial insufficiency, usually of the Raynaud type.

Central Nervous System: Light-headedness; mental depression manifested by insomnia, lassitude, weakness, fatigue; reversible mental depression progressing to cataplexy; visual disturbances; hallucinations; vivid dreams; an acute reversible syndrome characterized by disorientation for time and place, short-term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics. For immediate formulations, fatigue, lethargy, and vivid dreams appear dose related.

Gastrointestinal: Nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis.

Allergic: Pharyngitis and agranulocytosis, erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress.

Respiratory: Bronchospasm.

Hematologic: Agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura.

Auto-immune: In extremely rare instances, systemic lupus erythematosus has been reported.

Miscellaneous: Alopecia, LE-like reactions, psoriasisiform rashes, dry eyes, male impotence, and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin, serous membranes and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.

DOSAGE AND ADMINISTRATION. Inderal LA provides propranolol hydrochloride in a sustained-release capsule for administration once daily. If patients are switched from Inderal Tablets to Inderal LA Capsules, care should be taken to assure that the desired therapeutic effect is maintained. Inderal LA should not be considered a simple mg-for-mg substitute for Inderal. Inderal LA has different kinetics and produces lower blood levels. Retitration may be necessary, especially to maintain effectiveness at the end of the 24-hour dosing interval.

HYPERTENSION—Dosage must be individualized. The usual initial dosage is 80 mg Inderal LA once daily, whether used alone or added to a diuretic. The dosage may be increased to 120 mg once daily or higher until adequate blood pressure control is achieved. The usual maintenance dosage is 120 to 160 mg once daily. In some instances a dosage of 640 mg may be required. The time needed for full hypertensive response to a given dosage is variable and may range from a few days to several weeks.

ANGINA PECTORIS—Dosage must be individualized. Starting with 80 mg Inderal LA once daily, dosage should be gradually increased at three- to seven-day intervals until optimal response is obtained. Although individual patients may respond at any dosage level, the average optimal dosage appears to be 160 mg once daily. In angina pectoris, the value and safety of dosage exceeding 320 mg per day have not been established.

If treatment is to be discontinued, reduce dosage gradually over a period of a few weeks (see WARNINGS).

MIGRAINE—Dosage must be individualized. The initial oral dose is 80 mg Inderal LA once daily. The usual effective dose range is 160-240 mg once daily. The dosage may be increased gradually to achieve optimal migraine prophylaxis. If a satisfactory response is not obtained within four to six weeks after reaching the maximal dose, Inderal LA therapy should be discontinued. It may be advisable to withdraw the drug gradually over a period of several weeks.

HYPERTROPHIC SUBAORTIC STENOSIS—80-160 mg Inderal LA once daily.

PEDIATRIC DOSAGE—At this time the data on the use of the drug in this age group are too limited to permit adequate directions for use.

*The appearance of these capsules is a registered trademark of Ayerst Laboratories.

Reference:

1. Data on file, Ayerst Laboratories.

D7295/188

**WYETH
AYERST**

PHILADELPHIA, PA 19101

© 1988, Wyeth-Ayerst Laboratories.

TELL YOUR PATIENTS THEIR CHOLESTEROL NUMBER... BEFORE THEY ASK.

Reducing high blood cholesterol reduces the risk of heart disease. That's why we're telling Americans—through a national public service advertising campaign—to know their cholesterol number. Your patients may soon be asking you for their number and what it means.

And when they do, we can help. The National Cholesterol Education Program, administered by the National Heart, Lung, and Blood Institute, has developed adult treatment guidelines to help you identify high-risk patients and use the appropriate diet and/or drug therapy for those with elevated cholesterol levels.

Help your patients reduce their risk of heart disease. For a free copy of the *Report of the Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults*, complete the form below.

Name _____
Specialty _____
Address _____
City _____ State _____ Zip _____

Mail to: Cholesterol Adult Treatment Guidelines
National Cholesterol Education Program
National Heart, Lung, and Blood Institute
C-200-GA
Bethesda, MD 20892



NATIONAL CHOLESTEROL EDUCATION PROGRAM
NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

National Institutes of Health • Public Health Service • U.S. Department of Health and Human Services



“When I realized my chances of becoming disabled by age 65 were *three times greater* than the chances of death . . .

I compared disability insurance plans. And I decided that my MSMA-endorsed disability insurance plan

SERVES ME BEST!

It's not group insurance, but an individually-owned policy which is *non-cancellable* and *guaranteed renewable*.”

If you're a member of the Mississippi State Medical Association you may be eligible for this outstanding professional disability plan at *discounted premiums*.

- Non-cancellable, guaranteed renewable
- Medical specialty protection
- Presumptive loss provision
- Indexing of prior earnings
- Waiver of premium
- Cost of living rider
- Future disability insurance option
- Lifetime accident and sickness rider
- Total and residual disability protection

Offered by Paul Revere Insurance Company to MSMA members through its exclusive representatives, Professional Disability Specialists.

Jon B. Wimbish, Disability Specialist

1501 Lakeland Drive, Suite 200 Jackson, MS 39216 Telephone 362-9800

ORIGINAL PAPERS

Medial Collateral Ligament Tears of the Knee: A New Approach

WALTER R. SHELTON, M.D.

Jackson, Mississippi

UNTIL RECENTLY OPERATIVE REPAIR of acute knee ligament tears has been advocated as the treatment of choice.¹ Most orthopaedic surgeons felt that this approach produced the best results.

Technique

Over the past several years a new approach has been advocated for a specific knee injury, the isolated tear of the medial collateral ligament.² With the advent of arthroscopy and more recently the MRI scan, it is possible, along with a good physical examination, to make an accurate diagnosis of an isolated ligament tear. Many orthopaedists, myself included, have used these methods to establish that the anterior and posterior cruciate ligaments and the menisci not torn and proceed to treat an isolated medial collateral ligament tear with six weeks of functional bracing allowing knee motion from 60-90 degrees.

The advantages of this technique are numerous. If the MRI scan is conclusive that there are no other major associated ligament or meniscal tears, surgery is avoided. If arthroscopy is required then a much less extensive procedure is done compared to arthrotomy. The functional brace concept allows immediate motion and prevents the common sequelae of stiffness, muscle atrophy and chondromalacia of

the patella so commonly seen after open surgery and cast immobilization.

Over the past five years 11 knees in ten patients have been treated with the functional bracing. All of these cases have had complete tear of the medial collateral ligament demonstrated by clinical exam and stress x-ray showing greater than 1 cm opening of the medial knee joint on stressing.

Case Report 1

W. F. is a 19-year-old Jackson State University football player who presented after the ninth game of the season in the fall with a right medial knee injury. Clinical examination revealed a tear of the medial collateral ligament confirmed by stress x-ray showing greater than 1 cm opening. A diagnostic arthroscopy revealed no other major pathology and he was treated with six weeks of functional bracing with motion of 60-90 degrees. He returned to spring practice three months later as a first team center but had an identical injury on the left knee. He was again treated with arthroscopy and functional bracing and returned to play the entire following fall season with no knee complaints. On clinical examination both of his knees tested normal for stability.

Case Report 2

R. G. is a 16-year-old high school football player who had a left medial knee injury. Clinical examination and stress x-rays confirmed a medial col-

Dr. Shelton is engaged in the private practice of orthopedic surgery in Jackson, MS.

lateral ligament tear. MRI scan showed both cruciate ligaments and both menisci were intact and he was placed in a functional brace with controlled motion. Examination at three months revealed no instability.

Discussion

At followup examination all of the ten patients have returned to full active sports with no residual instability. Rehabilitation time and morbidity has been minimal.

In serious knee injuries, isolated tear of the medial collateral ligament occurs infrequently. Usually there are associated tears of the anterior cruciate

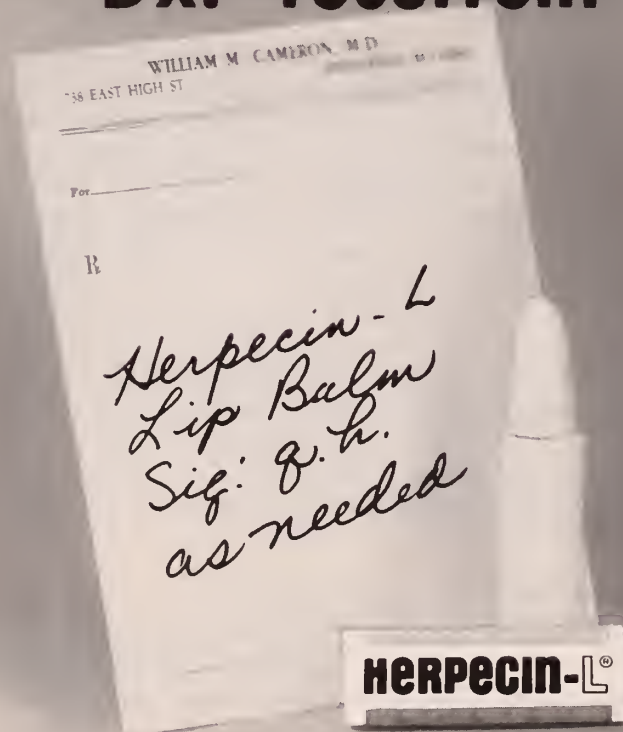
ligament, posterior cruciate ligament or menisci requiring extensive repair. In cases where damage to these other structures can be ruled out either by physical examination, arthroscopy and/or MRI scan, nonoperative treatment of medial collateral ligament tears produces excellent results. ★★★

1325 E. Fortification St. 39202

References

1. Crenshaw: Campbell's Operative Orthopaedics, Mosby Co., 1980, 6th Edition, p. 928-933.
2. Hastings, D. E.: The Non-Operative Management of Collateral Ligament Injuries of the Knee Joint. Clin. Orthop., 147:22-28, 1980.

Dx: recurrent herpes labialis



"HERPECIN-L is my **treatment of choice** for perioral herpes." GP, NY

"HERPECIN-L appears to actually **prevent** the blisters . . . used **soon enough**." DDS, MN

"HERPECIN-L . . . a **conservative approach** with **low risk/high benefits**." MD, FL

"Used at **prodromal symptoms** . . . blisters **never formed** . . . remarkable." DH, MA

"(In clinical trials) . . . **response was dramatic**. **HERPECIN-L** . . . proven **far superior**." DDS, PA

"All patients claimed **shorter duration** . . . at **prodromal symptoms** . . . **HERPECIN-L averted** the attacks." MD, AK

OTC. See P.D.R. for information. For samples to make your own clinical evaluation, write: CAMPBELL LABORATORIES, INC., P.O. BOX 812-MD, FDR STATION, NEW YORK, N.Y. 10150

In Mississippi HERPECIN-L is available at all *Eckerd, K & B, Revco, and Super D* and other select pharmacies.

Surgical Management of Small Cell Lung Cancer: A Case Report

BOBBY GRAHAM, JR., M.D.

TAWFIQ KHANSUR, M.D.

BRUCE LAMBUTH, M.D.

LODOVICO BALDUCCI, M.D.

Jackson, Mississippi

SMALL CELL LUNG CANCER (SCLC) is deemed a systemic disease in the majority of cases. The standard treatment for this malignancy is chemotherapy or chemoradiotherapy.¹ A subset of patients with SCLC is emerging whose disease appears localized and in whom resection may obtain cure or prolonged control of the tumor. We describe two such patients and explore the indications for surgical management of small cell lung cancer.

Case Report 1

In April 1986, J.O., a 72-year-old man, was admitted to his local hospital with pneumonia. A solitary peripheral nodule in the right mid lung was detected radiographically. Medical history was significant for smoking, diabetes mellitus, hypertension, coronary artery disease, and bilateral above-the-knee amputations for ischemic necrosis.

After a non-diagnostic fiberoptic bronchoscopy, he was followed with serial chest roentgenographs until December 1986. At that time the lesion had expanded to a size nearly double the original one (see Figure 1). A fluoroscopy guided needle biopsy revealed SCLC and the patient was referred to the Jackson Veterans Administration Medical Center (JVAMC) for further management. CT of the chest confirmed the presence of a nodule with the largest diameter measuring 3 cm in the right mid lung. Metastatic evaluation was negative. Surgical management was declined due to his poor medical condition. He has been treated with four courses of VP-

The authors describe two patients with small cell lung cancer (SCLC) presenting as a peripheral lung nodule. One patient was treated with chemoradiotherapy because his poor general condition precluded surgery. The other patient underwent surgical resection and is receiving adjuvant chemotherapy and radiotherapy. The authors note that indications for resection of SCLC include a peripheral lesion less than 3 cm in diameter and absence of mediastinal lymph node metastases. They report that the effectiveness of post surgical adjuvant chemotherapy is being investigated.

16 and cyclophosphamide with progressive decrease in size of the nodule and he is presently receiving chest and prophylactic cranial irradiation (PCI).

Case Report 2

K.M., a 64-year-old man, presented to his personal physician with acute onset of cough and sputum production in December 1986. His past medical history was unremarkable except for 80 pack/year smoking. A solitary peripheral nodule in the left upper lobe was apparent on chest radiography. Subsequent films at one month intervals revealed enlargement of the lung nodule (see Figures 2A and 2B). The patient was referred to the JVAMC where CT of the chest confirmed the presence of a single lesion, 1.3 cm on largest diameter. After negative mediastinoscopy, left upper lobectomy was per-

From the Jackson VA Medical Center and University of Mississippi Medical Center, Jackson, MS.

formed. The diagnosis was SCLC (see Figure 3). The hilar and mediastinal lymph nodes were not involved by the disease. Postoperative metastatic



Figure 1. Chest radiograph of patient 1 at the time when treatment was started.



Figure 2A. Chest radiograph of patient 2 at presentation.



Figure 2B. Chest radiograph of patient 2 at time of surgery.

work-up was negative and he is currently receiving prophylactic cranial irradiation and adjuvant chemotherapy consisting of cyclophosphamide, doxorubicin, and vincristine.

Discussion

These cases are of interest for two aspects; the management of peripheral lung nodules and the indication for resection of SCLC. During the first half of the century, surgery as sole treatment of SCLC seemed to offer little or no benefit.²

The Armed Forces Asymptomatic Pulmonary Nodule Study (AFASPNS) followed 1,134 patients with the incidental finding of a pulmonary nodule for a minimum of ten years.³ These investigators found that the pulmonary nodule harbored a primary lung cancer in 392 cases (34.5%). Calcification, cavitation, radiolucency, or satellite lesions were not reliable to determine the malignancy or benignancy of a peripheral pulmonary lesion in this study. Interestingly, the survival of patients with lung cancer whose radiographic lesion did not enlarge during the follow-up period, was not compromised from a delay in diagnosis. An expectant attitude with serial radiographic follow-up of the lesion has been recommended in part because the yield of fiberoptic bronchoscopy in this situation is very low and thoracotomy was the only dependable means to establish a diagnosis. Transthoracic needle biopsy has now become widely available and carries a minimal risk of complications. This procedure may afford an earlier diagnosis and more aggressive treatment of solitary pulmonary nodules.

In the AFASPNS, only 4% of the lung cancers were of the small cell type. This finding confirms the rarity of peripheral presentation of SCLC, which accounts for about 25% of all primary lung malignancies.

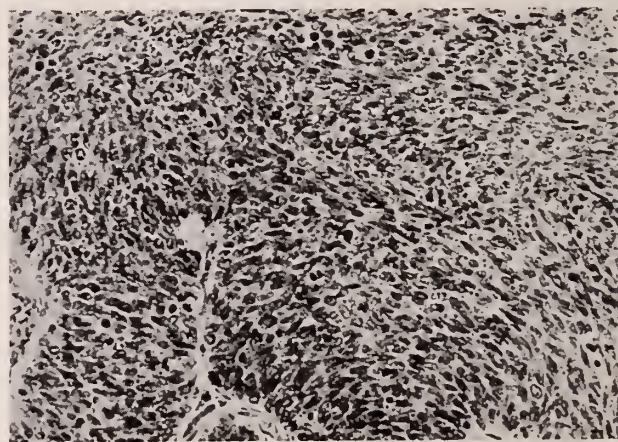


Figure 3. Histology of the tumor of patient 2 (HE \times 200).

nancies. Interestingly, 36% of the SCLC patients were alive at five years after resection. The survival was comparable with that in non-small cell subtypes of lung cancer.

The AFASPNS data first challenged the firmly held tenet that SCLC was in all cases a systemic disease in need of a systemic form of therapy.³ Since then other authors reported a 23-59% five-year survival after resection of SCLC.⁴⁻⁷ It should be noted however, that these results were obtained always in the highly selected and uncommon subgroups of patients whose disease presentation was by peripheral radiographic nodule. The survival was uniformly reduced when the lesion was larger than 3 cm and hilar lymph nodes were involved. Invasion of the mediastinal lymph nodes, of the pleura, or the chest wall, and location in the mainstem bronchus less than two centimeters from the carina heralded a mortality rate close to 96% by five years after surgery. In these circumstances, the acute surgical mortality is not justifiable by the poor outcome.

Although both our patients were technically resectable, surgery was contraindicated in the first case by his poor general medical condition.

There are two unanswered questions in the surgical management of SCLC. The first is whether adjuvant postoperative chemotherapy reduces the mortality from this disease. The second question is whether resection of residual disease after chemotherapy may prolong survival. In both instances, preliminary results of randomized clinical trials have been encouraging.^{4, 8}

Even though these data reflect a potential role for early surgical resection in patients with SCLC, the number of those who are operative candidates is probably no more than 10%. In the future it may be possible to select patients for primary resection based in part on the molecular biology of the tumor. Classic and variant cell lines have been identified in cell cultures based on histology and on the heterogeneity of expression of biochemical markers. Several-fold amplification of the c-myc oncogene has been demonstrated in the more aggressive variant cell line and patients who express these genetic abnormalities have a significantly shorter survival time.^{9, 10} Patients with the most aggressive tumors are the least likely candidates for curative resection.

Conclusion

A subset of SCLC patients having lesions 3 cm or less in diameter with or without regional node involvement may benefit from surgical resection. If there is no evidence of hilar nodal spread selected

patients with lesions larger than 3 cm may also be suitable for primary operative management. When the diagnosis of small cell carcinoma is made preoperatively, mediastinal exploration is mandatory to rule out occult mediastinal node metastases which would establish unresectability. Adjuvant chemotherapy and prophylactic cranial irradiation should be administered once the patient has satisfactorily healed postoperatively, and chest radiation should be given in cases of regional nodal involvement.

Adjuvant surgical resection of residual disease after response to chemotherapy needs studying in prospective investigations.

Future identification of oncogene products may allow more precise guidance of treatment modalities based on classic or variant cell line characteristics.

★★★

Dr. Graham: 2500 North State Street (39216)

References

1. Iannuzzi MC, Scoggin CH. Small Cell Lung Cancer. *Am Rev Resp Dis* 1986;134:593-608.
2. McDonald JR, McBurney RP, Conbrile JC, Paton MM. The Significance of Cell Types in Bronchogenic Carcinoma. *J Thorac Surg* 1951;22:63-73.
3. Higgins GA, Shields TW, Keehan RJ. The Solitary Pulmonary Nodule: Ten year follow-up of Veteran Administration Armed Forces Cooperative Study. *Arch Surg* 1975;110:570-575.
4. Shields TW, Higgins GA Jr, Matthews JM, Keehan RJ. Surgical Resection in the Management of Small Cell Carcinoma of the Lung. *J Thorac Cardiovasc Surg* 1982;84:481-488.
5. Meyer JA, Comis RL, Ginsberg ST, *et al.* The Prospect of Disease Control by Surgery Combined with Chemotherapy in Stage I and Stage II Small Cell Carcinoma of the Lung. *Ann Thorac Surg* 1983;36:37-41.
6. Karrer K, Denck H, Prisdum N, *et al.* Combination of Early Surgery for Cure and Polychemotherapy in Small Cell Bronchial Carcinoma. IN: *Proceedings of the 13th International Congress on Chemotherapy*. Vienna, 1983.
7. Shepard FA, Ginsberg RJ, Evans WK, *et al.* Reduction in Local Recurrence and Improved Survival in Surgically Treated Patients with Small Cell Lung Cancer. *J Thorac Cardiovasc Surg* 1983;86:498-506.
8. Comis R, Meyer J, Ginsberg S, *et al.* The Current Results of Chemotherapy Plus Adjuvant Surgery in Limited Small Cell Anaplastic Lung Cancer. *Proc Am Soc Clin Oncol* 1982;1:C-571.
9. Carney DN, Gazdar AF, Bepler G, *et al.* Establishment and Identification of Small Cell Lung Cancer Cell Lines Having Classic and Variant Features. *Cancer Res* 1985;45:2913-2923.
10. Johnson BE, Nau MN, Gazdar AF, *et al.* Oncogene Amplification of C-myc and N-myc in Cell Lines Established from Patients with Small Cell Lung Cancer (SCLC) is Associated with Shortened Survival. *Fourth World Conference on Lung Cancer. Abstract III*, 1985.

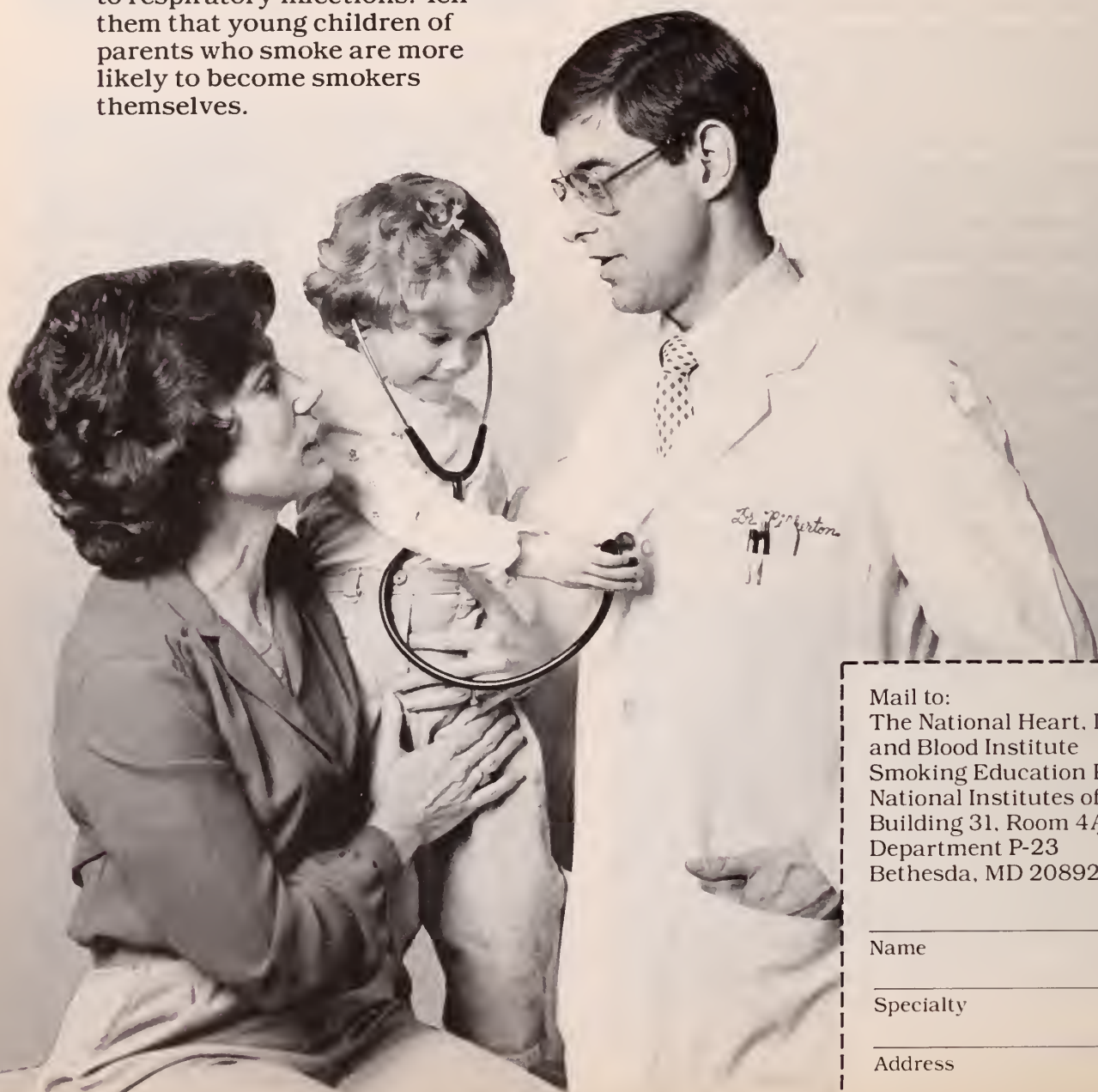
A Clinical Opportunity for Smoking Intervention

You can play a special role in reaching smokers. Encouraging parents not to smoke can improve the health of the entire family.

Take a few minutes to explain that children of parents who smoke are often more prone to respiratory infections. Tell them that young children of parents who smoke are more likely to become smokers themselves.

The minutes you spend can make a difference now, and in the years ahead.

For a free copy of *Clinical Opportunities for Smoking Intervention: A Guide for the Busy Physician*, complete the form below.



Mail to:
The National Heart, Lung,
and Blood Institute
Smoking Education Program
National Institutes of Health
Building 31, Room 4A 18
Department P-23
Bethesda, MD 20892



Name

Specialty

Address

City

Discovery: Anatomy of and Some Experiences With

JAMES D. HARDY, M.D.*

Jackson, Mississippi

IT IS A SIGNAL honor to be invited to make the address at this Spring Initiation Banquet. I was deeply appreciative last year when I was elected to honorary membership. And although I had always had some reservations regarding election to honorary membership in an academic achievement society, I could certainly applaud the chapter's decision in my case! Thus the fact of my having been elected only last year, and then invited as the speaker this year — this combination of circumstances may well represent a first for the Alpha of Alabama, and it presages the topic which I have chosen to discuss this evening: Discovery.

Anatomy of Discovery

What is Discovery? Webster's dictionary defines discovery as the act, or process, or instance of gaining [new] knowledge. The possibility of achieving a discovery is afforded to any and every observer or investigator, regardless of what field of endeavor is involved. One of the most exciting lectures I can remember was delivered in Chicago by a professor of archeology one evening. Prepared at the outset to be bored, I soon found myself so captivated by her explorations in Greece that I very nearly volunteered for the next summer's dig. And, after all, the sciences of Pasteur, Beethoven, Einstein and Renoir must all converge somewhere near infinity.

How Are Discoveries Made? Louis Pasteur has often been quoted as having remarked that fortune favors only the prepared mind. That is, while native intelligence is widely distributed, this intelligence must be developed and educated, in a general sense,

but then be specialized in a specific (graduate) direction. For example, the most intelligent aborigine, if illiterate, is unlikely to make and record a discovery: for if a discovery is not brought to the attention of others, usually through timely publication, the fact of the discovery is not recorded, recognized by others, and utilized. Therefore, to make a discovery and be credited therewith, the discoverer must have some degree of communication skill, and in our culture this means facility with the (English) language. But more than this basic education may be required. For instance, no matter how well educated the person is with general information, he or she cannot make a discovery in a highly specialized field without knowing what is already known — where the (published) knowledge frontier lies in that particular discipline. Therefore, discoveries are made, usually, only by those who have already achieved special knowledge or depth in the given field.

Categories of Discovery

One may categorize discoveries into four groups (Blalock): (1) Those made by chance or accident: serendipity; (2) those made by intention or design; (3) those made by intuition, imagination, or "hunch"; and (4) combinations of the above. And to these might be added, in some instances, one more: depth in mathematics. Some mathematicians have made important discoveries simply by recalculating data published by others; mathematical skills enabled the mathematician to perceive relationships not discernible to the original scientist.

Discovery by Chance or Accident: Serendipity. Many good examples of discovery by chance could be cited but those by Jenner and Withering will suffice.

Edward Jenner was an English physician who was born in 1749. While still in prep school, he was

* Veterans Administration Distinguished Physician.

An address delivered April 14, 1987, at the initiation ceremonies of the Alpha of Alabama Chapter of Phi Beta Kappa, Tuscaloosa, AL. At the time of this address, Dr. Hardy was professor and chairman of the Department of Surgery, University Medical Center, Jackson, MS.

told by a dairymaid that people who had had the relatively mild disease cowpox did not catch the dread smallpox. After he had become a physician, Jenner wrote to his mentor, the great surgeon John Hunter, and asked what he thought of it. Hunter wrote back, "Don't think. Experiment!" Jenner did precisely that. He vaccinated people with cowpox, which did either prevent or largely prevent smallpox in these patients, and today world-wide vaccination has essentially abolished smallpox. Children are no longer vaccinated against it. To be sure, it is a happy circumstance that animals do not get smallpox, and that thus there is no animal or fowl reservoir of the smallpox virus, which otherwise could not be totally eradicated.

Similarly, William Withering was an English physician who was born in 1741. One day, when his carriage taking him to a clinic had stopped in a small village for a change of horses, he was told of an old woman in the neighborhood who brewed herbs which cured the dropsy (fluid retention) of heart failure by increasing water excretion. Being a botanist, Withering investigated this report, and he eventually found that the one of the several herbs that was active was foxglove, which produced digitalis. Digitalis remains a cornerstone of heart failure treatment even today. Here we find a combination of chance, on the one hand, and the prepared mind (Withering's interest in botany) on the other hand.

Discovery by Design. A superb example of discovery by intention or design was the finding by Paul Ehrlich that arsphenamine was useful in the treatment of diseases caused by spirochaetes and, in particular, syphilis. He had investigated 605 drugs before number 606, arsphenamine, was proved successful.

Discovery by Intuition, Imagination, or "Hunch." This category is, in many ways, the most interesting. It probably reflects best how the average person imagines discoveries are made. But even here, fortune favors the prepared mind. And here the importance of another of Pasteur's dictums emerges: "Treasure your exceptions." By this he meant that when certain findings were different or divergent from the results routinely expected, there must be a (perhaps important) reason. And such an instance of discovery by imagination is singularly well exemplified by Sir Alexander Fleming's discovery of penicillin. All bacteriologists (and medical students!) had observed for decades that certain bacteria did not grow immediately adjacent to the circumference of a round colony of certain fungi.

However, it was left to Fleming, in 1929, to realize that the fungus, in this instance *Penicillium*, must produce some substance which repelled or lysed the surrounding bacteria. He found that infected mice could be cured by injections of an extract of this mold. And in due course he was awarded the Nobel prize. "To see the world in a grain of sand. . . ." Of course, his was the prepared mind (a bacteriologist); and he treasured the exception, the fact that particular bacteria on the culture plate did *not* grow around the mold.

Some Personal Experiences with Discovery

In venturing to mention some of the experiences we have had with research and discovery, I enter an immediate and, in my case, genuinely appropriate disclaimer of having made great discoveries. But whereas *my* modesty is fully appropriate, that of (now) Sir Peter Medawar may not have been. In 1960, I was invited to be part of a team of United States surgeons to put on a program at the Royal College of Surgeons in London. And since we were just getting our transplantation program into full swing, I had secured a letter of introduction to Professor Peter Medawar, from whose laboratory were coming some of the major advances in transplant immunology. His secretary first said that he was frightfully busy and would not be able to see me, but when I expressed regret and produced my letter of introduction, I was warmly received, after all. But each time I expressed admiration for the superb research of his research team, Dr. Medawar would interrupt, "Oh, no, my dear fellow, I must enter an immediate disclaimer. We have done nothing here." I spoke at the Royal College of Surgeons the next day and, as I was returning through Atlanta, I saw in the newspaper headlines "*Medawar Wins Nobel Prize.*" I immediately sent a wire: "No further disclaimers accepted here. Magnificent lifetime prize. Congratulations." To which he replied warmly with a handwritten letter two weeks or so later.

But whatever the merits of our own research at the University of Mississippi Medical Center, it will ultimately be assessed in the sure and long reach of history. Meanwhile research has been an important segment of my professional activities ever since I was a freshman in medical school.

Studies of Gastric Secretion. My first research project was taken on as an elective in freshman physiology in the spring of 1939. In brief, the objective was to determine whether or not fat (olive oil) introduced by tube into the duodenum would inhibit certain elements of gastric secretion, acid

and enzymes. We found that it did, but our interest here lies primarily in the sequel. I was asked by our research group and the faculty to present the research results to the entire freshman class and assembled members of the Department of Physiology. Afterward, the chairman of the department called me into his office and, in the course of the interview he said, "Hardy, to make a discovery, you've got to have either a new idea or a better method. Above all, do not pursue a research project using anything less than the best method currently available."

Body Fluid Kinetics and Body Composition. The next research project I will mention had to do with the measurement of the total body water by injecting the isotope D_2O (heavy water) intravenously, into human volunteers and then determining the volume of (body) water in which the measured amount of D_2O had been diluted. We found that in humans the biologic half-time of molecules of ingested water was 9.5 days, the remaining half being excreted by 29 days. In addition, we found that men of average obesity were approximately 60 percent water, on a body weight basis, and that women of average obesity were about 50 percent water. However, the leanest healthy man we could find proved to contain 73 percent water. Well, at the spring meeting of the American Physiological Society in Atlantic City I presented our data, including the fact that the leanest person was 73 percent water. The next speaker, however, stated that, in his *dog* studies, some of the animals had been 90 percent. Preposterous! Such 90 percent water dogs should have been flowing around like an amoeba. And, since our humans and his dogs were both mammals, either his data, or my data, were erroneous — and I was determined to have the audience know that I doubted the dog work. Therefore, at the close of his talk I arose, was acknowledged and said, "Mr. Moderator, may I inquire of the essayist as to the character of his dogs?" At which, the essayist sprang up and replied, "I'll have you know, sir, the character of my dogs was unimpeachable!" The audience roared, and from this I learned to phrase questions more carefully.

Discovery by Clinical Inspiration. When I was a resident in surgery at the University of Pennsylvania in Philadelphia, we had a wealthy patient from New York who had a colon cancer and who had promised my chief that he would give the chief "a boat" if the patient did well following his colon resection. Postoperatively the long tube that had been passed down through the stomach and into his intestine, to keep the intestine decompressed while the intestinal anastomosis healed, failed to drain more than a min-

imal amount of fluid. The chief was upset. He informed me sternly that that tube had better drain! Well, I recalled the occasional patient who had had very little tube drainage but who had done well and who had never developed abdominal distention during the postoperative period. I told the professor this, but he maintained an annoyed visage and once again stated emphatically that the tube had better drain — the implication being that my future welfare might suffer if the tube did not in fact drain an "adequate" volume of fluid during the night. Happily, although the tube drained very little fluid until noon the next day, it then did begin to drain freely and the patient did well. On the strength of this experience, as well as my memory of several similar earlier cases, I investigated carefully a series of such patients and found that it was not at all uncommon for the patient to drain relatively little fluid, and that the fluctuations in the volume of fluid secreted into the intestine postoperatively could be correlated with the level of adrenocortical activity. I said nothing to the professor while I was doing this research, but at the end I placed the completed manuscript on his desk without comment. He was surprised but delighted. Here, Pasteur's dictum of "treasure your exceptions" had prompted my study, which was published promptly in the *Annals of Surgery*.

Lung Cancer Causing Male Breast Enlargement. A man from Texas was admitted to our surgical service with remarkable enlargement of his breasts. Now, it should be mentioned that there are numerous causes of enlargement of the breasts in a man, but this patient had an additional finding: he had a mass in his left lung on chest x-ray. Meanwhile, physicians elsewhere had tried to cause his breasts to diminish in size by giving the patient injections of male hormone over a period of months. However, since we were interested in endocrinology and since measurements of blood and urinary estrogens and androgens were of special interest in our laboratory work, it occurred to us that this tumor in the lung might have some relationship to the breast enlargement. Suffice it to say, we demonstrated an increased estrogen metabolism in this man with lung cancer. We published this finding and relationship in the *Journal of the American Medical Association*. It was apparently a first demonstration that lung cancer could secrete estrogens to cause gynecomastia in the male. This finding was later widely confirmed.

Transplantation. The principal focus of research in our surgical laboratories over the years has been the transplantation of tissues and organs in animals

and in man. In human beings, we have transplanted the kidney, the intestine, the adrenal gland, the liver, the lung, and the heart. However, only three of these will be mentioned here.

With respect to kidney autotransplantation — that is, the moving of the patient's own kidney to a position closer to the bladder so that the injured ureter will reach to the bladder — we were the first successfully to perform this operation. Here again, it was a circumstance in which fortune favored the prepared mind. Kidneys were already being transplanted from one person to another in various medical centers of the world, including ours. However, we had long realized that it should not always be necessary to discard a kidney whose ureter had been injured, though a common procedure for the urological surgeon was to make certain that the opposite kidney was normal and then to remove the kidney whose ureter had been badly damaged. Eventually such a patient became available to us, the lower half of his right ureter having been injured. We transplanted the right kidney downward from its usual position to a site in the pelvis, from which position the remaining upper half of the ureter readily extended to the bladder and was successfully anastomosed to the bladder, the renal vein and the renal artery being anastomosed to the respective adjacent external iliac vessels. Our department received considerable credit for this successful autotransplantation, and this operation was a forerunner of many modifications for autotransplanting the kidneys, at times removing a diseased kidney and repairing it and then autotransplanting it down to the pelvis as we had done in 1962.

But it is to lung transplantation and heart transplantation that the research workers in our Department of Surgery at the University of Mississippi Medical Center have devoted the greatest effort, extending back to 1956. After performing large numbers of lung transplants in various animal species, we transplanted the first lung in man in 1963. Then, in 1964, following laboratory transplants in dogs and monkeys for eight years, we transplanted the first heart in man. Time does not permit my discussion of the details surrounding these first transplants in human beings. However, one particular incident is worth recounting, because of a specific sentence which was uttered at that time. In

1971, I spoke on lung transplantation and heart transplantation at the meeting of the International Society of Surgery in Moscow. I had failed to obtain a ticket to visit the Vishnevsky Institute, not having realized that tickets would be required and that they would soon be unavailable. Fortunately, at the end of my speech a small delegation was waiting at the side of the stage of the huge lecture hall, and this group, two of whom spoke excellent English, invited me to come with them the next day to the Vishnevsky Institute. The next day, after being shown around the Institute, I found myself the guest of honor at a rather large luncheon which included surgeons from both parts of Germany and Russia and various Balkan countries. They were speaking German and, unfortunately, despite three years of German in Morgan Hall here at the University of Alabama, and various travels in Germany since then, I understood little of what they were saying. But presently I was asked to stand and the interpreter and Professor Vishnevsky, director of the Institute, both stood. And here Doctor Vishnevsky said to me: "Dr. Hardy, a lot of water has passed under the bridge since you and your colleagues transplanted the first lung and the first heart in man. But remember this, *no words can ever be taken from a poem or notes from a song.*"

Thus, research and discovery and writing have been a magic carpet for me. I have visited and spoken in many countries, and my professional life has been enormously enriched by these associations with surgeons and other scientists throughout the world.

In closing, I wish to give a quiz: The members of this audience are all scholars and they have made many observations. However, there remain observations all around us, if we could but perceive them. For example, you may not have observed that most women have a longer index finger than the fourth finger, whereas most men have a longer fourth finger than the index finger. "To see the world in a grain of sand. . . ."

Finally, may I offer my warmest congratulations once again to our new initiates. This achievement will afford you stature in the eyes of your peers throughout a lifetime.

★★★

2531 Eastover Dr. (39211)

New this year . . .

One more reason to join the AMA

Special benefit packages available with 1988 membership



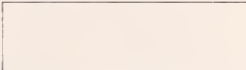
A diverse membership has diverse needs, and the AMA is committed to addressing those needs. This year we're introducing something new when you join the AMA or renew your membership. In your AMA Membership Kit you'll have the opportunity to sign up for one of three *benefit packages* of publications, conferences, participatory panels, focused issue updates, etc., on topics related to the area you designate. Each package is tailored to address your particular interests:

- *Medical and scientific information and education* designed to enhance your practice, profession, and the public health.
- *Representation concentrated specifically on economic concerns*, such as professional liability and third party reimbursement.
- *Representation on a broad range of issues*, including not only economic concerns, but also quality of care, ethical issues, public health, and scientific issues.

To receive your full range of benefits, select one and only one of these free packages by filling out the business reply card in your AMA Membership Kit.

Please look for the card in your AMA Membership Kit and return it promptly. Your new benefit package is one more way the AMA supports you as a physician.

James H. Sammons, MD
Executive Vice President

If your Preferred Professional Mailing Address should change, please make the change to the right of the address shown. Be sure to retain your membership card. Use this portion of the card for changes only.	
	New Address _____
	City _____
	State _____ Zip _____
	Telephone _____
IMPORTANT: In order to receive your full range of membership benefits, you MUST return this card.	
In addition to my usual benefits, I prefer a specially designed package of publications, topical conferences, participatory panels, focused issue updates... which focus on the following:	
(Check only one)	
<input type="checkbox"/>	Medical and Scientific Information and Education which will enhance my practice, profession, and the health of the public.
<input type="checkbox"/>	Representation Concentrated Specifically on Economic Concerns facing my practice and profession, such as professional liability and third-party reimbursement.
<input type="checkbox"/>	Representation on a Broad Range of Issues facing my practice and profession, including not only professional liability and third party reimbursement but also quality of care, ethical issues, public health, scientific issues, etc.

Look for this card in your AMA Membership Kit



American Medical Association
535 North Dearborn Street
Chicago, Illinois 60610



THE PRESIDENT'S PAGE

DAVID R. STECKLER, M.D.

Looking Toward the Future

IT'S BOTH AN honor and challenge to become president of our state professional association.

An honor because I have been elected by you to represent our profession.

A challenge because our profession at no time in its history has faced so many decisions which will impact its course for the next decade.

I deeply appreciate the honor and I willingly accept the challenge.

This will be an important year in the 132-year history of our association. We will undertake a strategic planning project to determine: what our profession wishes to accomplish over the next three to five years; what factors will foster or impede our success in this regard; and what types of programs should be in place to meet our needs. We have retained the highly respected management consulting firm of Coopers and Lybrand to assist us in this effort.

By this time each of you should have received a survey questionnaire which is an important component of the strategic planning project. I hope that you will actively participate in the project so that we can effectively plan the future direction of our association. I will be discussing the project with you during the upcoming year.

A handwritten signature in dark ink, appearing to read "David R. Steckler". The signature is fluid and cursive, with a long horizontal line extending to the right.

EDITORIALS

JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION

VOLUME XXIX, NUMBER 6
JUNE 1988

Fat Cats

I don't know about you but I have a *lot* of patients who are overweight. I would have more overweight patients, but a whole bunch won't come in to see me because they know that I'm going to weigh them and fuss at them about their weight. With the new emphasis on helping people help themselves take control of their own personal health, one of my own crusades down here in rural Mississippi is to let people be aware of their weight and its significance with respect to their health and future well-being.

It seems to me that people would have more self-control or whatever it takes to control their weight, but very few seem to have. I threaten, cajole, plead, lecture, beg and use every trick I can to get them to lose weight, but I seem to have little success. What makes it even worse is that these same people go to these weight clinics where you pay money and they seem to lose weight. Some of these more recalcitrant dieters of mine will go clear across the state to get those "(infamous) diet shots" and yes, as you might expect, they do lose weight.

Now I know that people from other parts of our country come down here and look at our poor starving masses, particularly in the Delta area of Mississippi. But let me tell you something, Brother, it's not the same over here in rural southeast Mississippi. I kept up with the number of obese, mainly middle-aged and older women that came into my office for a good while . . . until I lost count. I was very impressed with one undeniable fact, and that was the poorer you are, the fatter you are. There seems to be a direct relationship between obesity and being a welfare recipient. I'm not certain what the cause of this is, whether they are too busy eating to work or exercise, or whether they are afraid that they might miss a meal so they just eat a little all day long.

I get a little paranoid at times because I go to all of those lectures and seminars on diabetes and hypertension and the first thing all the experts tell me

to do in treating these problems is . . . you guessed it . . . just have your patient get their weight down to an acceptable level. It is embarrassing to admit, but I have such poor luck getting my patients' weight down that fully half of my diabetic patients are overweight and many are in the 200-lbs to 300-lbs range . . . disgraceful isn't it? I'd just like to slip in and check the weights on some of those experts' diabetic patients sometime. Oh well, I guess I'll just keep plugging away at them.

Thank God I'm a physician in this land of Fat Cats.

JOE JOHNSTON, M.D.
Associate Editor

Doctor, Can You Use Any Of These MSMA Information Services?

- Literature for your patients explaining why health care costs are going up
- Information on how you can conduct a patient survey in your practice
- CommuniCare brochures
- AIDS Speakers Bureau
- Marketing Tips for Physicians

(Contact MSMA today to request any of these materials or services.)

**You're
a Professional.**

**You need Professional
Health Insurance
Coverage.**

MSMA

Benefit Plan and Trust

MSMA Benefit Plan and Trust is a superior insurance program which fulfills the quality of coverage and affordability that everyone wants.

Sponsored by the Mississippi State Medical Association, the MSMA Benefit Plan and Trust offers life and health benefits to physician members of MSMA, their employees and families.

- \$1,000,000 lifetime benefits.
- Life Coverage up to \$50,000.
- Broad benefits with fair and equitable rates.
- Management by and for physicians.
- Non-profit and administered at lowest possible cost.

For Complete Description of Benefits Write:

MSMA Benefit Plan and Trust

P.O. Box 55509
Jackson, MS 39216

NEWS

Pressley Receives MSMA Tolbert Award



Jennifer Lynn Pressley of Coldwater was the recipient of the Dr. Virginia Stancel Tolbert Award, sponsored by the Mississippi State Medical Association, as the graduating student with the highest academic average in the School of Health Related Professions at the University of Mississippi Medical Center.

She earned the B.S. summa cum laude in dental hygiene.

A dean's list scholar and 1988 recipient of the Dean's List Award, Mississippi Dental Association Achievement Award, and the Trustmark National Bank Dental Hygiene Scholastic Award, she received the Mobley Award and the John Vick Bailey Scholarship in 1987. She is the daughter of Mr. and Mrs. Thomas A. Pressley of Coldwater.

UMC Students Match 100 Percent



Brian Eifert of Jackson, a senior medical student at the University of Mississippi Medical Center, lets his wife open the envelope — while he holds their son — which tells him he will do a residency in internal medicine in the Greenville Hospital System in Greenville, S.C. All of UMC's senior medical students got their choice of residency programs making the UMC School of Medicine the only medical school in the country with a 100 percent match in the National Resident Matching Program. Eifert is the son of the Rev. and Mrs. James E. Eifert.

AMA Issues Recommendations On Agricultural Pesticides

Recommendations on how physicians might deal with an emergency involving acute pesticidal exposure were included in a report presented to the AMA's House of Delegates at its last interim meeting.

The report, from the AMA Council on Scientific Affairs, dealt with a cancer risk of pesticides in agricultural workers. It stated that a large number of pesticidal compounds have exhibited genotoxicity or carcinogenicity in animal and *in vitro* screening tests, but none — except arsenic and vinyl chloride — have been definitely proven to be carcinogenic in man. The primary hazards of pesticides involve acute toxicity from dermal contact with or inhalation of a relatively large dose.

That hazard prompted the suggestions for physicians. Apart from the precautionary information and treatment procedures provided on the container label, physicians should avail themselves of the comprehensive toxicological data supplied by their regional poison control centers. The Mississippi Poison Control and Information Center is located in Jackson (601) 354-7660.

Physicians may also contact the national Pesticides Telecommunications Network (NPTN), a toll-free service (1-800-858-7378) available 24 hours a day, 365 days a year, that provides information on the recognition of pesticide poisoning and recommended treatment protocols. The Environmental Protection Agency has published its third edition of "Recognition and Management of Pesticide Poisonings" (EPA-540/9-80005) and an informative, non-technical "Citizen's Guide to Pesticides," both of which may be obtained from the Agency's Office of Pesticides and Toxic Substances in Washington, DC, or from the Agency's ten regional offices.

Physicians who are aware of any adverse effects from a particular pesticide exposure are urged to contact EPA with the details of the incident by writing or phoning: Frank Davido, Hazard Evaluation Division (TS-769C), Office of Pesticide Programs, EPA, 401 M Street SW, Washington, DC 20460; (703) 557-0576. Medical records will be considered confidential.

**MISS. POISON CONTROL
AND INFORMATION CENTER
(601) 354-7660**

UMC Guardian Society Officers Named



The Guardian Society of the University of Mississippi Alumni Association conducted its annual meeting in March and elected new officers for 1988-1989. From left, Dr. Normal C. Nelson, UMC vice chancellor for health affairs, and Ole Miss Chancellor R. Gerald Turner, are shown with Dr. W. E. Caldwell, immediate past chairman of the Society, Dr. Bryan Barksdale, chairman, and Dr. Estes M. Blackburn, Jr., chairman-elect. The Guardian Society is an organization of Ole Miss alumni and friends who provide special support for the Schools of Medicine, Nursing, Health Related Professions and Dentistry at the University of Mississippi Medical Center.

Next Month in Journal MSMA

- Profile of MSMA's new president, David R. Steckler, M.D.
- Radiologic Seminar CCXLXI
- Chylothorax
- A Medical Fairy Tale

UMC Cancer Program Granted Three-Year Approval

The Committee on Approvals of the Commission on Cancer of the American College of Surgeons granted three-year approval to the cancer program of The University Hospital — the teaching hospital for the University of Mississippi Medical Center following a review of the program in late March.

"All elements appear to be in place and functioning to provide educational, multidisciplinary exchange on cancer patient management, to encourage quality control and audits and to monitor the success of primary and secondary treatment through long-term follow up," said Dr. David Winchester, medical director for the cancer department of the ACS.

The University Hospital is a member of the Southwest Oncology Group and the Gynecologic Oncology Group and the UMC Children's Hospital is a member of the Pediatric Oncology Group.

Medico-Legal Brief

FTC Obtains Consent Order; Hospital Medical Staff Barred From Blocking HMO Expansion

The Federal Trade Commission (FTC) is continuing with its vigorous enforcement program against organized efforts by physicians to limit the impact of alternative delivery systems (ADS).¹ Recently, the FTC obtained a proposed² consent order from a hospital medical staff that would bar the medical staff from attempting to block health maintenance organizations or other health care facilities in Prince George's County, Maryland.

The medical staff involved was part of Doctors Hospital of Prince George's County (DH), which is located in Lanham, Maryland, a suburb of Washington, D.C. DH is owned by American Medical International, Inc. (AMI), a for profit corporation that operates a number of proprietary hospitals in various parts of the United States. AMI also operates for profit ADSs. Among ADSs operated by

AMI was George Washington University Health Plan (GWU).³ GWU is a health maintenance organization with its primary base of operations in Washington, D.C.

In October of 1985, GWU attempted to open a satellite facility⁴ in Prince George's County, which is adjacent to Washington, D.C. According to the FTC staff, the DH medical staff coerced and pressured AMI not to open the facility. Allegedly, the medical staff threatened to force DH to close, presumably by refusing to admit patients to DH, if AMI opened the new facility for GWU. AMI succumbed to the pressure, and arranged for certain members of the DH medical staff to treat members of the GWU plan in their offices for one year instead of opening the new facility.

The FTC staff alleged that the medical staff of DH forced AMI not to open the new facility for the purpose of limiting competition. The proposed consent order would bar the medical staff from engaging in coercive conduct that has the effect of restricting an ADS or others from offering health care services.

Importantly, the consent order would not prohibit

"A Sign of the Times!"



SALES — SERVICE — LEASING

HARRELD CHEVY-OLDS

Call Toll-free 1-800-451-3908

MEDICO-LEGAL/Continued

the DH medical staff from forming their own integrated joint venture to negotiate contracts with ADSs. Presumably such a joint venture would compete with other joint ventures or groups of physicians for contracts with ADSs, but would be prohibited from use as a vehicle to boycott ADSs which did not offer terms acceptable to the joint venture.

EDWARD B. HIRSHFELD, J.D.
Associate General Counsel
American Medical Association

¹ ADSs are privately financed health care programs which offer an alternative to, and compete with, traditional health insurance programs. They include health maintenance organizations, preferred provider organizations, and others. Gen-

erally, ADSs offer more complete coverage for a lower monthly payment or premium than do traditional programs. Usually ADSs restrict the choice of health care providers available to their members or beneficiaries. They do so in order to obtain discounts from providers in return for directing all or a portion of the ADS members to the participating providers, and in order to maintain better control over the amount of health care services rendered to ADS members. (The process of reviewing whether services rendered to ADS members are or were necessary as known as utilization review.) Providers sometimes resent the pressures to lower their rates caused by ADSs and also resent ADS utilization rules that interfere with providers' decisions about how to treat patients.

² The proposed consent order is subject to public comment until March 28, 1988.

³ Subsequent to the relevant events, George Washington University acquired control of GWU by purchasing AMI's majority equity interest in GWU.

⁴ It is possible that GWU would have provided new physicians at this facility, as opposed to requesting existing practitioners in the county to treat patients at the facility. The information available is not clear.

PHYSICIANS, THERE ARE TWO KINDS OF FLEXIBILITY IN THE ARMY RESERVE WE THINK YOU'LL LIKE.

One, time. We know how tough it is for a busy physician to make weekend time commitments. So we offer flexible training programs that allow a physician to share some time with his or her country. We arrange a schedule to suit your requirements.

Two, the opportunity to explore other phases of medicine, to add a different kind of knowledge—the challenge of military health care. It's a flexibility which could prove to be both stimulating and rewarding, with the opportunity to participate in a variety of programs that can put you in contact with medical leaders from all over the country.

See how flexible we can be, call our Army Medical Personnel Counselor:

MAJ MEL VAN DYKE
(504) 522-1977/1978

BE ALL YOU CAN BE.
ARMY RESERVE.



(ciprofloxacin HCl/Miles)



A REVOLUTIONARY ORAL ANTIMICROBIAL WITH THE POWER OF PARENTERALS

- Highly active *in vitro* against a broad range of gram-positive and gram-negative pathogens, including methicillin-resistant *Staphylococcus aureus* and *Pseudomonas aeruginosa**
- For treatment of infections in the:
 - lower respiratory tract[†]
 - urinary tract[†]
 - skin/skin structure[†]
 - bones and joints[†]
- Convenient *B.I.D.* dosage – 250 mg, 500 mg and 750 mg tablets

**In vitro* activity does not necessarily imply a correlation with *in vivo* results.

[†]Due to susceptible strains of indicated pathogens. See indicated organisms in Brief Summary.

CIPRO* SHOULD NOT BE USED IN CHILDREN OR PREGNANT WOMEN.

A history of hypersensitivity to ciprofloxacin is a contraindication to its use. A history of hypersensitivity to other quinolones may also contraindicate the use of ciprofloxacin.



Miles Inc.
Pharmaceutical Division
400 Morgan Lane
West Haven, CT 06516

Please see adjacent page of this advertisement for Brief Summary of Prescribing Information.

Cipro[®] TABLETS

(ciprofloxacin HCl/Miles)

■ 500 mg B.I.D. for most infections;
750 mg B.I.D. for severe or complicated infections.

BRIEF SUMMARY CONSULT PACKAGE INSERT FOR FULL PRESCRIBING INFORMATION INDICATIONS AND USAGE

Cipro[®] is indicated for the treatment of infections caused by susceptible strains of the designated microorganisms in the conditions listed below

Lower Respiratory Infections caused by *Escherichia coli*, *Klebsiella pneumoniae*, *Enterobacter cloacae*, *Proteus mirabilis*, *Pseudomonas aeruginosa*, *Haemophilus influenzae*, *Haemophilus parainfluenzae*, and *Streptococcus pneumoniae*

Skin and Skin Structure Infections caused by *Escherichia coli*, *Klebsiella pneumoniae*, *Enterobacter cloacae*, *Proteus mirabilis*, *Proteus vulgaris*, *Providencia stuartii*, *Morganella morganii*, *Citrobacter freundii*, *Pseudomonas aeruginosa*, *Staphylococcus aureus* (penicillinase and nonpenicillinase-producing strains), *Staphylococcus epidermidis*, and *Streptococcus pyogenes*

Bone and Joint Infections caused by *Enterobacter cloacae*, *Serratia marcescens*, and *Pseudomonas aeruginosa*

Urinary Tract Infections caused by *Escherichia coli*, *Klebsiella pneumoniae*, *Enterobacter cloacae*, *Serratia marcescens*, *Proteus mirabilis*, *Providencia rettgeri*, *Morganella morganii*, *Citrobacter diversus*, *Citrobacter freundii*, *Pseudomonas aeruginosa*, *Staphylococcus epidermidis*, and *Streptococcus faecalis*

Infectious Diarrhea caused by *Escherichia coli* (enterotoxigenic strains), *Campylobacter jejuni*, *Shigella flexneri*, and *Shigella sonnei** when antibacterial therapy is indicated

*Efficacy for this organism in this organ system was studied in fewer than 10 infections

Appropriate culture and susceptibility tests should be performed before treatment in order to isolate and identify organisms causing infection and to determine their susceptibility to ciprofloxacin. Therapy with Cipro[®] may be initiated before results of these tests are known, once results become available appropriate therapy should be continued. As with other drugs, some strains of *Pseudomonas aeruginosa* may develop resistance fairly rapidly during treatment with ciprofloxacin. Culture and susceptibility testing performed periodically during therapy will provide information not only on the therapeutic effect of the antimicrobial agent but also on the possible emergence of bacterial resistance

CONTRAINDICATIONS

A history of hypersensitivity to ciprofloxacin is a contraindication to its use. A history of hypersensitivity to other quinolones may also contraindicate the use of ciprofloxacin

WARNINGS

CIPROFLOXACIN SHOULD NOT BE USED IN CHILDREN OR PREGNANT WOMEN. The oral administration of ciprofloxacin caused lameness in immature dogs. Histopathological examination of the weight bearing joints of these dogs revealed permanent lesions of the cartilage. Related drugs such as nalidixic acid, cinoxacin, and norfloxacin also produced erosions of cartilage of weight-bearing joints and other signs of arthropathy in immature animals of various species (SEE ANIMAL PHARMACOLOGY SECTION IN FULL PRESCRIBING INFORMATION)

PRECAUTIONS

General:

As with other quinolones, ciprofloxacin may cause central nervous system (CNS) stimulation, which may lead to tremor, restlessness, lightheadedness, confusion, and very rarely to hallucinations or convulsive seizures. Therefore, ciprofloxacin should be used with caution in patients with known or suspected CNS disorders, such as severe cerebral arteriosclerosis or epilepsy, or other factors which predispose to seizures (SEE ADVERSE REACTIONS)

Crystals of ciprofloxacin have been observed rarely in the urine of human subjects but more frequently in the urine of laboratory animals. Crystalluria related to ciprofloxacin has been reported only rarely in man, because human urine is usually acidic. Patients receiving ciprofloxacin should be well hydrated, and alkalinity of the urine should be avoided. The recommended daily dose should not be exceeded. Alteration of the dosage regimen is necessary for patients with impairment of renal function (SEE DOSAGE AND ADMINISTRATION SECTION IN FULL PRESCRIBING INFORMATION)

Drug Interactions

Concurrent administration of ciprofloxacin with theophylline may lead to elevated plasma concentrations of theophylline and prolongation of its elimination half-life. This may result in increased risk of theophylline-related adverse reactions. If concomitant use cannot be avoided, plasma levels of theophylline should be monitored and dosage adjustments made as appropriate

Antacids containing magnesium hydroxide or aluminum hydroxide may interfere with the absorption of ciprofloxacin, resulting in serum and urine levels lower than desired, concurrent administration of these agents with ciprofloxacin should be avoided

Probenecid interferes with the renal tubular secretion of ciprofloxacin and produces an increase in the level of ciprofloxacin in the serum. This should be considered if patients are receiving both drugs concomitantly

As with other broad-spectrum antibiotics, prolonged use of ciprofloxacin may result in overgrowth of nonsusceptible organisms. Repeated evaluation of the patient's condition and microbial susceptibility testing is essential. If superinfection occurs during therapy, appropriate measures should be taken

Information for Patients

Patients should be advised that ciprofloxacin may be taken with or without meals. The preferred time of dosing is two hours after a meal. Patients should also be advised to drink fluids liberally and not take antacids containing magnesium or aluminum concomitantly or within two hours after dosing. Ciprofloxacin may cause dizziness or lightheadedness, therefore patients should know how they react to this drug before they operate an automobile or machinery or engage in activities requiring mental alertness or coordination

Carcinogenesis, Mutagenesis, Impairment of Fertility

Eight *in vitro* mutagenicity tests have been conducted with ciprofloxacin and the test results are listed below

- Salmonella/Microsome Test (Negative)
- E. coli* DNA Repair Assay (Negative)
- Mouse Lymphoma Cell Forward Mutation Assay (Positive)
- Chinese Hamster V₇₉ Cell HGPRT Test (Negative)
- Syrian Hamster Embryo Cell Transformation Assay (Negative)
- Saccharomyces cerevisiae* Point Mutation Assay (Negative)
- Saccharomyces cerevisiae* Mitotic Crossover and Gene Conversion Assay (Negative)
- Rat Hepatocyte DNA Repair Assay (Positive)

Thus, two of the eight tests were positive, but the following three *in vivo* test systems gave negative results

- Rat Hepatocyte DNA Repair Assay
- Micronucleus Test (Mice)
- Dominant Lethal Test (Mice)

Long-term carcinogenicity studies in animals have not yet been completed

Pregnancy - Pregnancy Category C

Reproduction studies have been performed in rats and mice at doses up to six times the usual daily human dose and have revealed no evidence of impaired fertility or harm to the fetus due to ciprofloxacin. In rabbits, as with most antimicrobial agents, ciprofloxacin (30 and 100 mg/kg orally) produced gastrointestinal disturbances resulting in maternal weight loss and an increased incidence of abortion. No teratogenicity was observed at either dose. After intravenous administration, at doses up to 20 mg/kg, no maternal toxicity was produced, and no embryotoxicity or teratogenicity was observed. There are, however, no adequate and well-controlled studies in

CONVENIENT B.I.D. DOSAGE

Recommended dosage schedule

Infection Site*	Severity of Infection	Dosage
Respiratory Tract*	Mild/Moderate	500 mg B.I.D.
Bone and Joint*	Severe/Complicated	750 mg B.I.D.
Skin/Skin Structure*	Mild/Moderate	250 mg B.I.D.
Urinary Tract*	Severe/Complicated	500 mg B.I.D.
Infectious Diarrhea*	Mild/Moderate/Severe	500 mg B.I.D.

pregnant women. SINCE CIPROFLOXACIN, LIKE OTHER DRUGS IN ITS CLASS, CAUSES ARTHROPATHY IN IMMATURE ANIMALS, IT SHOULD NOT BE USED IN PREGNANT WOMEN (SEE WARNINGS)

Nursing Mothers

It is not known whether ciprofloxacin is excreted in human milk, however, it is known that ciprofloxacin is excreted in the milk of lactating rats and that other drugs of this class are excreted in human milk. Because of this, and because of the potential for serious adverse reactions from ciprofloxacin in nursing infants, a decision should be made to discontinue nursing or to discontinue the drug, taking into account the importance of the drug to the mother

Pediatric Use

Ciprofloxacin should not be used in children because it causes arthropathy in immature animals (SEE WARNINGS)

ADVERSE REACTIONS

Ciprofloxacin is generally well tolerated. During clinical investigation, 2,799 patients received 2,868 courses of the drug. Adverse events that were considered likely to be drug related occurred in 7.3% of courses, possibly related in 9.2%, and remotely related in 3.0%. Ciprofloxacin was discontinued because of an adverse event in 3.5% of courses, primarily involving the gastrointestinal system (1.5%), skin (0.6%), and central nervous system (0.4%)

The most frequently reported events, drug related or not, were nausea (5.2%), diarrhea (2.3%), vomiting (2.0%), abdominal pain/discomfort (1.7%), headache (1.2%), restlessness (1.1%), and rash (1.1%)

Additional events that occurred in less than 1% of ciprofloxacin courses are listed below. Those typical of quinolones are italicized

- GASTROINTESTINAL (See above), painful oral mucosa, oral candidiasis, dysphagia, intestinal perforation, gastrointestinal bleeding
- CENTRAL NERVOUS SYSTEM (See above), dizziness, lightheadedness, insomnia, nightmares, hallucinations, manic reaction, irritability, tremor, ataxia, convulsive seizures, lethargy, drowsiness, weakness, malaise, anorexia, phobia, depersonalization, depression, paresthesia
- SKIN/HYPERSENSITIVITY (See above), pruritus, urticaria, photosensitivity, flushing, fever, chills, angioedema, edema of the face, neck, lips, conjunctivae or hands, cutaneous candidiasis, hyperpigmentation, erythema nodosum
- SPECIAL SENSES blurred vision, disturbed vision, [change in color perception, overbrightness of lights], decreased visual acuity, diplopia, eye pain, tinnitus, bad taste
- MUSCULOSKELETAL joint or back pain, joint stiffness, achiness, neck or chest pain, flare-up of gout
- RENAL/UROGENITAL interstitial nephritis, renal failure, polyuria, urinary retention, urethral bleeding, vaginitis, acidosis
- CARDIOVASCULAR palpitations, atrial flutter, ventricular ectopy, syncope, hypertension, angina pectoris, myocardial infarction, cardiopulmonary arrest, cerebral thrombosis
- RESPIRATORY epistaxis, laryngeal or pulmonary edema, hiccup, hemoptysis, dyspnea, bronchospasm, pulmonary embolism

Most of these events were described as only mild or moderate in severity, abated soon after the drug was discontinued, and required no treatment

In several instances, nausea, vomiting, tremor, restlessness, agitation, or palpitations were judged by investigators to be related to elevated plasma levels of theophylline possibly as a result of a drug interaction with ciprofloxacin

Adverse Laboratory Changes Changes in laboratory parameters listed as adverse events without regard to drug relationship

- Hepatic - Elevations of ALT (SGPT) (1.9%), AST (SGOT) (1.7%), alkaline phosphatase (0.8%), LDH (0.4%), serum bilirubin (0.3%)
- Hematologic - eosinophilia (0.6%), leukopenia (0.4%), decreased blood platelets (0.1%), elevated blood platelets (0.1%), pancytopenia (0.1%)
- Renal - Elevations of Serum creatinine (1.1%), BUN (0.9%)
- CRYSTALLURIA, CYLINDRURIA, AND HEMATURIA HAVE BEEN REPORTED

Other changes occurring in less than 0.1% of courses were: Elevation of serum gamma-glutamyl transferase, elevation of serum amylase, reduction in blood glucose, elevated uric acid, decrease in hemoglobin, anemia, bleeding diathesis, increase in blood monocytes, and leukocytosis

OVERDOSAGE

Information on overdosage in humans is not available. In the event of acute overdosage, the stomach should be emptied by inducing vomiting or by gastric lavage. The patient should be carefully observed and given supportive treatment. Adequate hydration must be maintained. In the event of serious toxic reactions from overdosage, hemodialysis or peritoneal dialysis may aid in the removal of ciprofloxacin from the body, particularly if renal function is compromised

DOSAGE AND ADMINISTRATION

The usual adult dosage for patients with urinary tract infections is 250 mg every 12 hours. For patients with complicated infections caused by organisms not highly susceptible, 500 mg may be administered every 12 hours. Respiratory tract infections, skin and skin structure infections, and bone and joint infections may be treated with 500 mg every 12 hours. For more severe or complicated infections, a dosage of 750 mg may be given every 12 hours

The recommended dosage for infectious diarrhea is 500 mg every 12 hours

In patients with renal impairment, some modification of dosage is recommended (SEE DOSAGE AND ADMINISTRATION SECTION IN FULL PRESCRIBING INFORMATION)

HOW SUPPLIED

Cipro[®] (ciprofloxacin HCl/Miles) is available as tablets of 250 mg, 500 mg, and 750 mg in bottles of 50, and in Unit-Dose packages of 100 (SEE FULL PRESCRIBING INFORMATION FOR COMPLETE INFORMATION)

* Due to susceptible strains of indicated pathogens. See indicated organisms in Brief Summary

For further information, contact the Miles Information Service:
1-800-642-4776. In VA. call collect: 703-391-7888.

COMMITTED TO THERAPEUTIC EFFICIENCY



Miles Inc.
Pharmaceutical Division
400 Morgan Lane
West Haven, CT 06516

PERSONALS

TIM ASHLEY of Morton has been recertified by the American Academy of Family Physicians.

JOHN G. CADEN of Jackson announces his retirement from the practice of orthopaedic surgery at Jackson Bone and Joint Clinic.

C. RON CANNON of Jackson has been appointed to a four-year term on the joint task force on new material of the American Board of Otolaryngology and the American Academy of Otolaryngology Head and Neck Surgery.

BERT CHEVIS of Bay St. Louis spoke on AIDS at a meeting of the Hancock County Community Services Planning Council.

ROBERT COLLINS of Mississippi State University student health services was speaker at a workshop conducted by the National Association of Social Workers, Mississippi Chapter.

FRANK E. DEMENT, III of Hattiesburg has associated with the Hattiesburg Clinic for the practice of pediatrics, with offices at 207 South 28th Avenue.

ALVA DILLON, JR. of McComb announces the association of GLORIA D. FRELIX for the practice of family medicine at 634 Summit Street.

DAVID ELLIS of New Albany, WALTER GOUGH of Drew, and KEN GRAFTON of Laurel have been recertified by the American Academy of Family Physicians.

JOHN B. HICKS of Meridian has been certified as a diplomate of the American Board of Internal Medicine in the subspecialty of cardiovascular disease.

RICHARD S. HOLLIS of Amory was speaker at the annual convention of the Mississippi Society of Medical Assistants in Columbus.

JAMES HUGHES of UMC taught AO/ASIF basic and advanced courses in Sun Valley, Idaho.

SAMUEL JOHNSON of UMC attended a meeting in Hazlehurst of the Royal Maid Board of Directors.

KIMBLE LOVE of Hattiesburg has associated with the Hattiesburg Clinic for the practice of pediatrics at 207 South 28th Avenue.

L. L. MCINTYRE of Picayune was speaker at a public seminar at Crosby Memorial Hospital on breast cancer.

JOHN W. MCFADDEN of Tupelo made a presentation on "New Developments in the Management of Low Back Pain" at meetings of medical staffs at Fort Polk and Leesville, Louisiana.

JOSEPH R. MITCHELL of Gulfport and JAMES H. SHIRLEY of Tupelo were elected as physician advisers to the Mississippi Society of Medical Assistants.

JOHN E. MITCHELL of Rolling Fork and WILLIAM E. MOAK of Richton have been recertified by the American Academy of Family Physicians.

JOHN MORRISON of UMC was guest lecturer at meetings of the Ob-Gyn Society of Charlotte, North Carolina, and the Society for Gynecologic Investigation in Baltimore.

DAVID OWEN of Hattiesburg spoke on "Risk Reduction and Early Detection of Cancer" at a public educational seminar.

JAMES H. SAMS of Columbus announces the association of ROBERT D. VOLLER, JR. for the practice of anesthesiology.



*At the
Millsaps Buie House, our
bed and breakfast accommodations
recall those graceful days before the
turn of the century.*

*Whether business or pleasure
brings you to Jackson, our home
and our hearts are yours.*



601 352-0221
628 North State Street, Jackson, MS 39202
A 19th century urban retreat for the 20th century traveler

PERSONALS/Continued

WILLIAM D. STEPHENS has associated with Gulf Health Specialists, 1110 Broad Avenue, in Gulfport, for the practice of internal medicine.

WENDELL H. STOCKTON of Amory was speaker at the annual convention of the Mississippi Society of Medical Assistants.

ANCEL TIPTON of Jackson announces the relocation of his office for the practice of medical neurology and clinical physiology to Suite 500, 971 Lakeland Drive.

LAMAR WEEMS of UMC attended a meeting of the Committee on Hospital Medical Staffs of the American Hospital Association in Chicago.

GUY T. VISE, JR. of Jackson was a member of the faculty for the 1988 Valbella Orthopaedic Conference in Valbella-Lenzerheide, Switzerland.

POSTGRADUATE CALENDAR

August

OPHTHALMOLOGY UPDATE

Aug. 6

Ramada Renaissance Hotel, Jackson

ADVANCED TRAUMA LIFE SUPPORT PROVIDER COURSE

Aug. 18-19

University Medical Center

For more information or a program brochure, contact the University of Mississippi Medical Center Division of Continuing Health Professional Education, 2500 North State Street, Jackson, Mississippi 39216-4505; or call (601) 984-1300.

PRINTING — OFFICE SUPPLIES

EQUIPMENT — FURNITURE



Premier Printing Company

2485 West Capitol

Jackson, Mississippi

Phone 352-4091



We earn
your trust every day.SM



TrustmarkTM
National Bank

Jackson/Bogue/Chitto/Brookhaven/Canton/Canton/Columbia
Georgetown/Gloster/Greenville/Greenwood/Hattiesburg/Hazlehurst
Leland/Liberty/Madison/Magee/McComb/Pearl/Petal/Ridgeland
Tylertown/Wesson

Member FDIC



WE'RE ALWAYS ON CALL. 1-800-352-2226

Call the travel specialists toll-free!

When you come down with the urge or necessity to travel, call Avanti for expert service. Everything we do for you is free of charge, even the phone call.

Our travel specialists will take care of all your plans, plane reservations, car rental, hotel accommodations and much more. We're here to help you with charters, tours, cruises, personal vacations, business meetings and conventions.

The next time you make travel arrangements, remember Avanti is always on call, toll-free.

AVANTI
TRAVEL, INC.
Three Lakeland Circle • Jackson, Mississippi 39216 • 981-9111
Call Toll-Free Nationwide 1-800-327-4236

MEETINGS

National and Regional

American Medical Association, Annual Meeting, June 26-30, 1988, Chicago. James H. Sammons, Executive Vice President, 535 N. Dearborn St., Chicago, IL 60610.

State and Local

Mississippi State Medical Association, 120th Annual Session, June 15-19, 1988, Biloxi. Charles L. Mathews, Executive Secy., 735 Riverside Drive, P.O. Box 5229, Jackson 39216.

Mississippi Academy of Family Physicians, Annual Meeting, July 27-30, 1988, Biloxi. Mrs. Alyce Palmore, Executive Secy., P.O. Box 12330, Jackson 39211.

Amite-Wilkinson Counties Medical Society, 3rd Monday, March, June, September, December. James S. Poole, Secy., The Gloster Clinic, Gloster 39638. Counties: Amite, Wilkinson.

Central Medical Society, 1st Tuesday, February, April, October, December, 6:30 p.m., Primos Northgate Restaurant, Jackson. Patsy Douglas, Executive Secy., 735 Riverside Dr., Jackson, MS 39202. Counties: Hinds, Leake, Madison, Rankin, Scott, Simpson.

Claiborne County Medical Society, 1st Tuesday, each month, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Secy., P.O. Box 147, Port Gibson 39150. County: Claiborne.

Clarksdale and Six Counties Medical Society, 3rd Wednesday, April, and 1st Wednesday, November, 2:00 P.M., Clarksdale, Rodney Baine, Secy., 110 Yazoo Ave., Clarksdale 38614. Counties: Coahoma, Quitman, Tallahatchie, Tunica.

Coast Counties Medical Society, January, May, and November. H. S. Barrett, Secy., P.O. Box 1810, Gulfport 39501. Counties: Hancock, Harrison, Stone.

Delta Medical Society, 2nd Wednesday, April and October. Walter H. Rose, Secy., 122 E. Baker St., Indianola 38751. Counties: Bolivar, Humphreys, Leflore, Sunflower, Washington, Yazoo.

DeSoto County Medical Society, 3rd Thursday, February and August, 1:00 p.m., Kenny's Restaurant, Hernando. Malcolm D. Baxter, Jr., Secy., Baxter Clinic, Hernando 38632. County: DeSoto.

East Mississippi Medical Society, 1st Tuesday, February, April, June, October, December. Charles L. Wilkinson, Secy., Mail: Ms. Jenkins, P.O. Box 4053, Meridian 39305. Counties: Clarke, Kemper, Lauderdale, Neshoba, Newton, Winston.

Homochitto Valley Medical Society, Meetings scheduled quarterly. Fred G. Emrick, Secy., P.O. Box 1488, Natchez 39120. Counties: Adams, Jefferson.

North Central District Medical Society, 3rd Wednesday, March, June, September, January. George V. Smith, 905 Avent Dr., Grenada 38901. Counties: Attala, Carroll, Choctaw, Granada, Holmes, Montgomery, Webster.

Northeast Mississippi Medical Society, 1st Thursday, March, June, September, December. Roger L. Lowery, Secy., 618 Pegram Dr., Tupelo 38801. Counties: Alcorn, Calhoun, Chickasaw, Itawamba, Lee, Monroe, Pontotoc, Prentiss, Tishomingo, Union.

North Mississippi Medical Society, 1st Thursday, April, September, December. W. A. Spencer, Secy., 2161 South Lamar, Oxford 38655. Counties: Benton, Lafayette, Marshall, Panola, Tate, Tippah, Yalobusha.

Pearl River County Medical Society, 2nd Monday, March, June, September, December. J. C. Griffing, Secy., Crosby Memorial Hospital, Picayune 39466. County: Pearl River.

Prairie Medical Society, 2nd Tuesday, March, June, September, December. Perrin N. Smith, Secy., P.O. Box 9000, Columbus 39705. Counties: Clay, Oktibbeha, Noxubee, Lowndes.

Singing River Medical Society, quarterly, December, March, June and September. John J. McClosky, Secy., 3003 Short Cut Rd., Pascagoula 39567. County: Jackson.

South Central Mississippi Medical Society, 2nd Tuesday, March, June, September, December. Julian T. Janes, Secy., 304 Clark, McComb 39648. Counties: Copiah, Franklin, Lawrence, Lincoln, Pike, Walthall.

South Mississippi Medical Society, 2nd Thursday, March, June, September, December. George R. Bush, Secy., 307 S. 13th Ave., Laurel 39440. Counties: Covington, Forrest, George, Greene, Jasper, Jefferson Davis, Jones, Lamar, Marion, Perry, Smith, Wayne.

West Mississippi Medical Society, 2nd Tuesday, January, March, May, September, October, November, 6:30 p.m., Maxwell's Restaurant, Vicksburg. Wayne M. Petrie, Secy., 1202 Mission Park Dr., Vicksburg 39180. Counties: Issaquena, Sharkey, Warren.

Mississippi Institutions and Organizations Accredited for Continuing Medical Education

The following Mississippi institutions and medical organizations have been accredited in accordance with the "Essentials for Accreditation of Institutions and Organizations Offering Continuing Medical Education Programs" of the Liaison Committee on Continuing Medical Education. Information concerning CME programs for physicians offered by these accredited sources may be obtained by writing the Director, Continuing Medical Education, at the individual institution or organization.

Council on Scientific Assembly
Mississippi State Medical Association
735 Riverside Drive
Jackson, MS 39202

North Mississippi Medical Center
830 Gloster Avenue
Tupelo, MS 38801

Forrest General Hospital
Box 1897
Hattiesburg, MS 39401

Mississippi Baptist Medical Center
1225 N. State Street
Jackson, MS 39201

Gulf Coast Community Hospital
4642 W. Beach Boulevard
Biloxi, MS 39531

Jefferson Davis Memorial Hospital
Box 1488
Natchez, MS 39120

King's Daughter Hospital
Box 948
Brookhaven, MS 39601

Riverside Hospital
Lakeland Drive
Jackson, MS 39208

Biloxi Regional Medical Center
1559 Lafayette St.
Biloxi, MS 39533

Jeff Anderson Regional Medical Center
2124 14th St.
Meridian, MS 39301

Northwest Mississippi Regional Medical Center
Box 1218
Clarksdale, MS 38614

North Panola County Hospital
Drawer 160
Sardis, MS 38666

Singing River Hospital
P.O. Box 112
Pascagoula, MS 39567

Magnolia Hospital
Alcorn Drive
Corinth, MS 38834

Greenwood Leflore Hospital
1508 Leflore Avenue
Greenwood, MS 38930

Gulfport Memorial Hospital
4500 13th Street
Gulfport, MS 39501

Oxford-Lafayette County Hospital
P.O. Box 946
Oxford, MS 38655

St. Dominic-Jackson Memorial Hospital
969 Lakeland Dr.
Jackson, MS 39216

Delta Medical Center
P.O. Box 5247
Crossroads Station
Greenville, MS 39704-5247

Methodist Hospital
P.O. Box 1311
Hattiesburg, MS 39401

NEW MEMBERS

HERZOG, JOHN L., Meridian. Born Aug. 26, 1955, Vicksburg; M.D., University of Mississippi School of Medicine, Jackson, 1981; interned, medicine residency, and cardiology residency, University of Tennessee School of Medicine, Memphis, 1981-87; elected by East Mississippi Medical Society.

HOLDINESS, GARY DONALD, Kosciusko. Born Newton, MS, Feb. 7, 1958; M.D., University of Mississippi School of Medicine, Jackson, 1983; interned and family medicine residency, University of Alabama, Selma, 1983-86; fellowship in geriatrics, University of Southern California, Rancho Los Amigos Medical Center, 1986-87; elected by North Central Medical Society.

MONTGOMERY, STEPHEN Q., Pontotoc. Born Pontotoc, Oct. 21, 1958; M.D., University of Mississippi School of Medicine, Jackson, 1984; interned and family practice residency, University of Alabama at Tuscaloosa, 1984-87; elected by Northeast Mississippi Medical Society.

MOSQUERA, LUIS F., Yazoo City. Born Colombia, July 26, 1947; M.D., University of Panama, 1973; interned and general surgery residency, Social Security Hospital, Panama, 1973-80; elected by Delta Medical Society.

SLEDGE, CHARLES C., Newton. Born New Orleans, May 2, 1957; M.D., University of Mississippi School of Medicine, Jackson, 1983; interned and family medicine residency, University Medical Center, Jackson, 1983-86; elected by East Mississippi Medical Society.

DEATHS

WALDRON, WILLARD L., Jackson. Born Water Valley, MS, April 2, 1909; M.D., Tulane University School of Medicine, New Orleans, June 1936; interned one year, Illinois Central Hospital, Chicago; psychiatry residency, Mississippi State Hospital, Whitfield, 1937-40; died April 28, 1988, age 79.

JUNE 1988

MEDICAL CLINIC For Sale or Lease

Due to retirement, physician who has been at this location since 1955 wishes to sell or lease medical clinic. All medical equipment, including lab and x-ray, furniture and fixtures included.

2000 square-foot building on 30 × 208.6 lot with parking in the rear. Prime Northeast Jackson location, convenient to area hospitals. Two consultation rooms, three exam rooms, minor surgery room, nurse's office, laboratory and x-ray. Ideal for 2 doctors.

For more information, please contact:

Mr. Jack Lowery
Deposit Guaranty National Bank
Trust Division
601-354-8118

Does Your Office Use ENVELOPES?

5000 for \$99⁹⁵

(#10 Reg. Add 10%
for Window Envelopes)

Up to four lines printed in upper left corner. Packed 500 per box. Price includes your imprint in black or standard red, blue or green ink.

Mississippi Residents add 6% Sales Tax

All **Prepaid Orders** will be shipped on our trucks or UPS at no additional charge

Mail or Phone Orders To:

Northtowne Printers

3909 Northview Dr.
Jackson, MS 39206

(601) 981-2675

PLACEMENT SERVICE

PHYSICIANS AVAILABLE

PHYSICIAN COMPLETING RESIDENCY in obstetrics and gynecology seeks practice opportunity in Mississippi. Available July 1989. Contact Greg Patton, M.D., 2325 Glenmary avenue #2, Louisville, KY 40204.

EXPERIENCED PHYSICIAN, seeking licensure, wants position as assistant, Location flexible. P.O. Box 225, Bay Springs, MS 39422.

PHYSICIAN completing residency in general surgery, and spouse (board-eligible pediatrician) seek practice opportunities in Mississippi. Location flexible. Contact Dinesh Ranjan, M.D., 2118 Chantilla Rd., Catonsville, Md 21228.

NATIVE MISSISSIPPIAN seeking practice opportunity in Ob-Gyn. Will complete residency and be available in July 1989. Contact Walter Wolfe, M.D. 722 West Austin Dr., Peoria, IL 61614; (309) 655-2000.

PHYSICIANS WANTED

EMERGENCY PHYSICIANS WANTED. Part-time and full-time positions in northeast Mississippi. Call (601) 328-8385.

BOARD CERTIFIED or board eligible orthopedist wanted to join established clinic in metropolitan area of Mississippi. Three or four-man rotation. General orthopedics with interest in sports medicine desired. Box O, Miss. State Medical Association, P.O. Box 5229, Jackson, MS 39216.

A Commitment to Excellence in Health Care

Mississippi Emergency Association, P.A. (MEA) a physician-owned and managed group has created an environment for physicians that promotes the ideals of private practice while freeing doctors from the administrative and financial demands of the private practitioner.

Board certified or board eligible physicians in the area of Emergency Medicine, Internal Medicine, and Family Medicine are presented a variety of professional and personal rewards, including excellent salaries, benefits, and advancement opportunities.

MEA is a dynamic, growing corporation that delivers quality health care. If you would like to know what career opportunities we can offer you, send your curriculum vitae to Sheila M. Stringer or call (601) 366-6503.

**Mississippi Emergency
Association, P.A.
P.O. Box 12917
Jackson, MS 39236-2917**

PHYSICIANS NEEDED

Physicians (especially specialists such as ophthalmologists, pediatricians, orthopedists, neurologists, etc.) interested in performing consultative evaluations (according to Social Security guidelines) should contact the Medical Relations Office. WATS 1-800-962-2230; Jackson, 922-6811; extensions 2276, and 2190.



**DISABILITY DETERMINATION SERVICES
1-800-962-2230**

TWO FAMILY MEDICINE PHYSICIANS needed to fill vacancies. Options of practice include: (a) partnership with local well-established Family Physician who has excellent practice. Terms negotiable with this physician; (b) solo practice with contract that includes guaranteed salary, office, staff, malpractice insurance, supplies and moving costs. Franklin County Hospital meets HMSA criteria. The county is rural, has excellent school system, and is within 30 minutes of three larger cities with established referral system. Call (601) 384-5801; Bill Martin, Administrator, Franklin County Hospital, Meadville, MS.

POSITION AVAILABLE for young internist and family practitioner in rural Mississippi. Excellent living conditions and schools. Contact: Dr. D. K. Goel, P.O. Box 268, Prentiss, MS 39474; (601) 792-5183 or (601) 371-2572.

NORTH ALABAMA ESTABLISHED SURGICAL PRACTICE FOR SALE. BC/BE, vascular and endoscopy capability a must. Great financial incentives. Call Eileen Wallach collect at (404) 393-1210.

CLASSIFIED

X-RAY MACHINE in excellent condition, medical supplies and equipment, waiting room furniture. Best offer. Call (601) 328-0830.

2V STAT STAT STAT STAT STAT STAT
Software and knowledge base for diagnoses and treatment, covering 69 different medical specialties; \$95 for demo disk. The more you know, the better you treat. The most updated medical algorithms at your fingertips! ! 2V MedTech Corporation, 2480 windy Hill Road, Suite 201, Marietta, GA 33067. (404) 956-1855; Telex 55134/Medvideo.

For information about the *Journal's* classified section or placement service, please contact the Managing Editor, P.O. Box 5229, Jackson, MS 39216.

Index to Advertisers

Avanti	187	Northtowne Printers	189
Campbell Laboratories	168	Premier Printing	186
Disability Determination Service	190	Roche Laboratories	third, fourth covers, 14B
Harreld Chevrolet	183	Smith Kline and French	14A
Hinds General Hospital	8	St. Stanislaus	6
Eli Lilly and Co.	4	Trustmark	186
Miles Pharmaceuticals	184a, 184B	U. S. Army Reserve	10, 184
Millsaps Buie House	185	Jon Wimbish	12
Miss. Emergency Association	190	Wyeth-Ayerst Laboratories	10A, 10B, 10C, 10D
Medical Assurance Co.	second cover		
MSMA Benefit Plan and Trust	180		

Who would say something nice about a bill collector?

Over 1,200 professional and trade associations, including yours.

It's true. The bill collecting services of I.C. System have been endorsed by over 1,200 associations around the country, including the one you belong to.

We're proud of these endorsements. We've made a concerted effort to bring high standards of professionalism, ethics, and effectiveness to the collection process. We believe we've succeeded and, apparently, your association agrees.

So if you've been billing people who aren't paying you, now you know who to contact.

Although we're headquartered in St. Paul, Minnesota, we have communication centers in every state of the union. We'll assign a local I.C. representative to your account who will be supported by a full range of collection services and

personnel, including carefully-trained telephone contact specialists. We'll even provide initial training on how to use our service for the person(s) in your office handling accounts receivable.

But most important, we *guarantee* results. Our fee structure combines a very competitive commission rate with a retainer (corporate or standard) scaled to your needs. And we guarantee to keep collecting for as long as it takes to recover *at least ten times the amount of that retainer*.

To find out how the I.C. System approach can work for you, call toll free (800) 824-9469, ext. 330. In Minnesota, call (612) 483-8201, ext. 330. Or return the coupon.



I want to recover the money that's owed me. Please provide me with information on the I.C. System approach.

Name _____

Title _____

Firm _____

Address _____

City _____ State _____ Zip _____

Telephone number _____

Mail to: I.C. System, Inc., 444 East Highway 96, P.O. Box 64639, St. Paul, Minnesota 55164-0639

A better alternative for hypertensives who are going bananas...

Spare your patients the extra cost—
in calories, sodium and dollars.

Spare your patients the rigors of
dietary K⁺ supplementation.

DYAZIDE[®]

25mg Hydrochlorothiazide/50mg Triamterene/SKF

Effective antihypertensive* therapy...without the bananas

DAW
'DYAZIDE' AS WRITTEN.

* Not for initial therapy. See brief summary.

Before prescribing, see complete
prescribing information in
SK&F CD, literature or PDR.
The following is a brief summary.

WARNING

This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

Contraindications: Concomitant use with other potassium-sparing agents such as spironolactone or amiloride. Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K⁺ levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K⁺ intake. Associated widened QRS complex or arrhythmia requires prompt additional therapy. Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available. Sensitivity reactions may occur in patients with or

without a history of allergy or bronchial asthma. Possible exacerbation or activation of systemic lupus erythematosus has been reported with thiazide diuretics.

Precautions: The bioavailability of the hydrochlorothiazide component of 'Dyazide' is about 50% of the bioavailability of the single entity. Theoretically, a patient transferred from the single entities of triamterene and hydrochlorothiazide may show an increase in blood pressure or fluid retention. Similarly, it is also possible that the lesser hydrochlorothiazide bioavailability could lead to increased serum potassium levels. However, extensive clinical experience with 'Dyazide' suggests that these conditions have not been commonly observed in clinical practice. Angiotensin-converting enzyme (ACE) inhibitors can elevate serum potassium; use with caution with 'Dyazide'. Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids, and during concurrent use with amphotericin B or corticosteroids or corticotropin[ACTH]). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Cumulative effects of the drug may develop in patients with impaired renal function. Thiazides should be used with caution in patients with impaired hepatic function. They can precipitate coma in patients with severe liver disease. Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic and hemolytic anemia have been reported with thiazides. Thiazides may cause manifestation of latent diabetes mellitus. The effects of oral anticoagulants may be decreased when used concurrently with hydrochlorothiazide; dosage adjustments may be necessary. Clinically insignificant reductions in arterial responsiveness to norepinephrine have been reported. Thiazides have also been shown to increase the paralyzing effect of nondepolarizing muscle relaxants such as tubocurarine. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. Triamterene has been found in renal stones in association with the other usual calculus components. Therefore, 'Dyazide' should be used with caution in patients with histories of stone formation. A few occurrences of acute renal failure have been reported in patients on 'Dyazide' when treated with indomethacin. Therefore, caution is advised in administering nonsteroidal anti-inflammatory agents with 'Dyazide'. The

following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine. Hypokalemia is uncommon with 'Dyazide', but should it develop, corrective measures should be taken such as potassium supplementation or increased dietary intake of potassium-rich foods. Corrective measures should be instituted cautiously and serum potassium levels determined. Discontinue corrective measures and 'Dyazide' should laboratory values reveal elevated serum potassium. Chloride deficit may occur as well as dilutional hyponatremia. Concurrent use with chlorpromazine may increase the risk of severe hyponatremia. Serum PBI levels may decrease without signs of thyroid disturbance. Calcium excretion is decreased by thiazides. 'Dyazide' should be withdrawn before conducting tests for parathyroid function. Thiazides may add to or potentiate the action of other antihypertensive drugs. Diuretics reduce renal clearance of lithium and increase the risk of lithium toxicity.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth, anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances; postural hypotension (may be aggravated by alcohol, barbiturates, or narcotics). Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and respiratory distress including pneumonitis and pulmonary edema, transient blurred vision, sialadenitis, and vertigo have occurred with thiazides alone. Triamterene has been found in renal stones in association with other usual calculus components. Rare incidents of acute interstitial nephritis have been reported. Impotence has been reported in a few patients on 'Dyazide', although a causal relationship has not been established.

Supplied: 'Dyazide' is supplied as a red and white capsule, in bottles of 1000 capsules; Single Unit Packages (unit-dose) of 100 (intended for institutional use only); in Patient-Pak[™] unit-of-use bottles of 100.

BRS-DZ-L45

a product of
SK&F CO.
Citra, P.R. 00639

© SK&F Co., 1987

**We need
someone
with the
confidence
of a surgeon,
the dedication
of a
marathoner
and the
courage of
an explorer.**

We need someone to
fill a unique job opening.

Someone to spend
two years in another
country. To live and work
in another culture. To
learn a new language and
acquire new skills.

We need someone
who wants to help im-
prove other people's lives.
Who's anxious to build
lasting friendships. To
gain memories and expe-
rience that will last a
lifetime. And a sense of
fulfillment few jobs can
match.

We need a Peace Corps
volunteer. Interested?
The first step is easy.
Call 1-800-424-8580,
Ext. 93.

Peace Corps.

The toughest job you'll ever love.



FORGET



NOT



Roche Medication Education Booklets supplement your instructions to patients. So forget **ME** not. The Limbitrol® (chloradiazepoxide and amitriptyline HCl/Roche)® booklet is part of The Roche Medication Education Program.

This important program helps your patients remember and understand:

- What the medication is and why they are taking it
- The importance of staying with the prescribed course of treatment
- What foods and drinks to avoid
- Possible side effects

For a free supply of Limbitrol booklets, complete the coupon below and mail it to: Professional Services Department, Roche Laboratories, a division of Hoffmann-La Roche Inc., 340 Kingsland Street, Nutley, New Jersey 07110-1199

NAME _____

STREET ADDRESS _____

CITY _____

STATE _____

ZIP _____

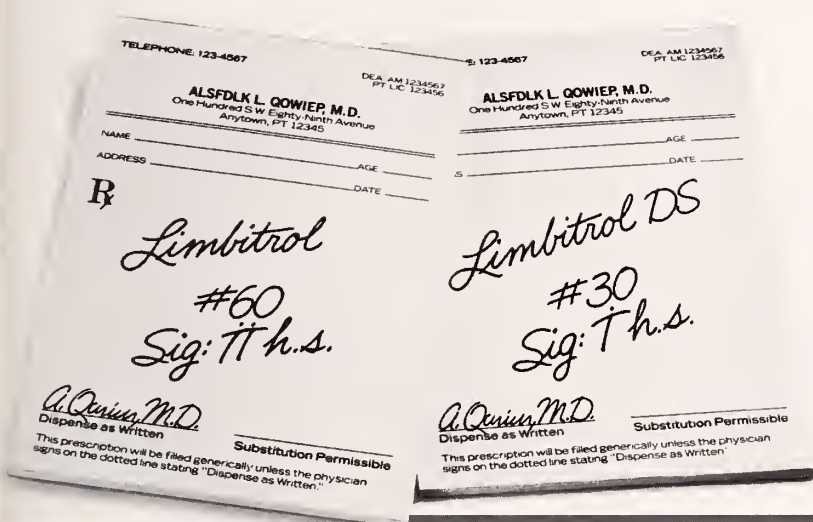
Roche Laboratories

a division of Hoffmann-La Roche Inc.

PLANDEX 35201

In moderate depression and anxiety

- ➡ 74% of patients experienced improved sleep after the first *h.s.* dose¹
- ➡ First-week improvement in somatic symptoms¹
- ➡ 50% greater improvement with Limbitrol in the first week than with amitriptyline alone²



Protect Your Prescribing Decision:
Specify "Do not substitute."

Limbitrol®

Each tablet contains 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt) (V)

Limbitrol® DS

Each tablet contains 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt) (V)

References: 1. Data on file, Hoffmann-La Roche Inc., Nutley, NJ. 2. Feighner VP, et al: *Psychopharmacology* 61:217-225, Mar 22, 1979.

Limbitrol®

Tranquilizer—Antidepressant

Before prescribing, please consult complete product information, a summary of which follows:

Contraindications: Known hypersensitivity to benzodiazepines or tricyclic antidepressants; concomitant use with MAOIs or within 14 days of monoamine oxidase inhibitors (then initiate cautiously, gradually increasing dosage until optimal response is achieved); during acute recovery phase following myocardial infarction.

Warnings: Use with caution in patients with history of urinary retention or angle-closure glaucoma. Severe constipation may occur when used with anticholinergics. Closely supervise cardiovascular patients. Arrhythmias, sinus tachycardia, prolongation of conduction time, myocardial infarction and stroke reported with tricyclic antidepressants, especially in high doses. Caution patients about possible combined effects with alcohol and other CNS depressants and against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving).

Usage in Pregnancy: Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations. Consider possibility of pregnancy when instituting therapy.

Withdrawal symptoms of the barbiturate type have occurred after discontinuation of benzodiazepines (see Drug Abuse and Dependence).

Precautions: Use cautiously in patients with a history of seizures, in hyperthyroid patients, those on thyroid medication, patients with impaired renal or hepatic function. Because of suicidal ideation in depressed patients, do not permit easy access to large quantities of drug. Periodic liver function tests and blood counts recommended during prolonged treatment. Amitriptyline may block action of guanethidine or similar antihypertensives. When tricyclic antidepressants are used concomitantly with cimetidine (Tagamet), clinically significant effects have been reported involving delayed elimination and increasing steady-state concentrations of the tricyclic drugs. Use of Limbitrol with other psychotropic drugs has not been evaluated; sedative effects may be additive. Discontinue several days before surgery. Limit concomitant administration of ECT to essential treatment. See Warnings for precautions about pregnancy. Should not be taken during the nursing period or by children under 12. In elderly and debilitated, limit to smallest effective dosage to preclude ataxia, oversedation, confusion or anticholinergic effects. Inform patients to consult physician before increasing dose or abruptly discontinuing this drug.

Adverse Reactions: Most frequent: drowsiness, dry mouth, constipation, blurred vision, dizziness, bloating. Less frequent: vivid dreams, impotence, tremor, confusion, nasal congestion. Rare: granulocytopenia, jaundice, hepatic dysfunction. Others: many symptoms associated with depression including anorexia, fatigue, weakness, restlessness, lethargy.

Adverse reactions not reported with Limbitrol but reported with one or both components or closely related drugs: **Cardiovascular:** Hypotension, hypertension, tachycardia, palpitations, myocardial infarction, arrhythmias, heart block, stroke. **Psychiatric:** Euphoria, apprehension, poor concentration, delusions, hallucinations, hypomania, increased or decreased libido. **Neurologic:** Incoordination, ataxia, numbness, tingling and paresthesias of the extremities, extrapyramidal symptoms, syncope, changes in EEG patterns. **Anticholinergic:** Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract. **Allergic:** Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus. **Hematologic:** Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia. **Gastrointestinal:** Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, black tongue. **Endocrine:** Testicular swelling, gynecomastia in the male, breast enlargement, galactorrhea and minor menstrual irregularities in the female, elevation and lowering of blood sugar levels, and syndrome of inappropriate ADH (antidiuretic hormone) secretion. **Other:** Headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, jaundice, alopecia, parotid swelling.

Drug Abuse and Dependence: Withdrawal symptoms similar to those noted with barbiturates and alcohol have occurred following abrupt discontinuance of chlordiazepoxide; more severe seen after excessive doses over extended periods; milder after taking continuously at therapeutic levels for several months. Withdrawal symptoms also reported with abrupt amitriptyline discontinuation. Therefore, after extended therapy, avoid abrupt discontinuation and taper dosage. Carefully supervise addiction-prone individuals because of predisposition to habituation and dependence.

Overdosage: Immediately hospitalize patient. Treat symptomatically and supportively. I.V. administration of 1 to 3 mg physostigmine salicylate may reverse symptoms of amitriptyline poisoning. See complete product information for manifestation and treatment.

How Supplied: Double strength (DS) Tablets, white, film-coated, each containing 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt), and Tablets, blue, film-coated, each containing 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt)—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 50.

ROCHE

ROCHE PRODUCTS INC.
Manati, Puerto Rico 00701

In the depressed and anxious patient

See Improvement In The First Week And The Weeks That Follow

- ➔ 74% of patients experienced improved sleep after the first *h.s.* dose¹
- ➔ First-week reduction in somatic symptoms¹

Caution patients about the combined effects of Limbitrol with alcohol or other CNS depressants and about activities requiring complete mental alertness, such as operating machinery or driving a car. In general, limit dosage to the lowest effective amount in elderly patients.

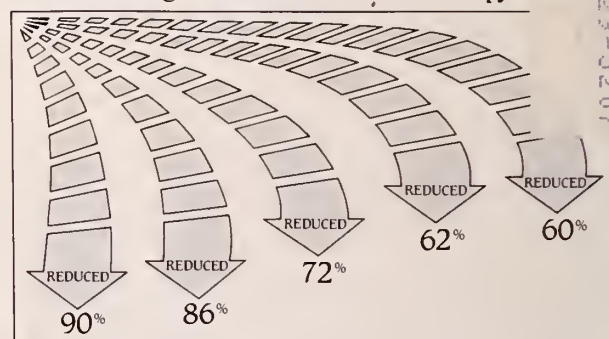
Limbitrol[®]

Each tablet contains 5 mg clordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt) (IV)

Limbitrol DS[®]

Each tablet contains 10 mg clordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt) (IV)

Percentage of Reduction in Individual Somatic Symptoms During First Week of Limbitrol Therapy*



VOMITING NAUSEA HEADACHE ANOREXIA CONSTIPATION
*Patients often presented with more than one somatic symptom.

Copyright © 1988 by Roche Products Inc. All rights reserved.
Please see summary of product information inside back cover.



LIBRARY
JUN 05 1988
NEW YORK ACADEMY
OF MEDICINE

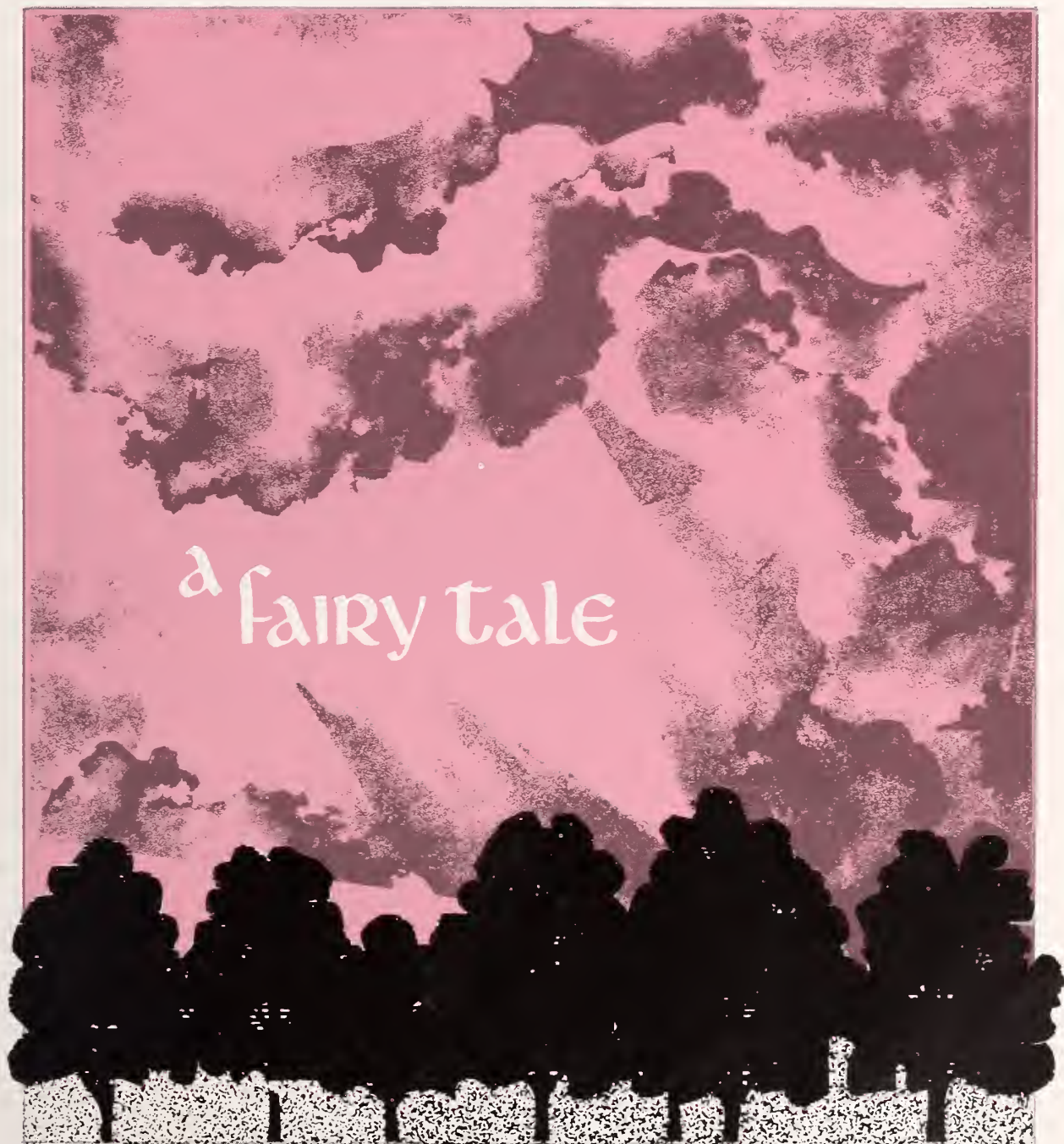
N.Y. ACADEMY OF MED
225 E 103RD ST
NEW YORK NY 10029-5207

JOURNAL

OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION

JULY

1988



There is strength in numbers. (And our numbers are growing.)



Seated, Left to Right: Cheryl Maxwell (Claims Secretary), Lisa Noble (Underwriting Secretary), Maria Graham (Claims Secretary), Kim Ormond (Receptionist), Mike Houpt (General Manager), and C.G. "Tanny" Sutherland, M.D. (Medical Director)

Standing, Left to Right: C.R. "Bob" Montgomery (General Counsel), Lisa Stewart (Underwriting Secretary), Sharon Thompson (Claims Secretary), Craig Brown (Underwriting Manager), Joey Grimes (Controller), Chuck Dunn (Assistant General Manager), and Debbie Sutherland (Bookkeeper)

Since we wrote our first policy in November of 1977, we have grown to serve more physicians than any other medical liability insurance company in Mississippi.

Why do more physicians turn to Medical Assurance Company? Our staff has grown from two in 1978 to five in 1983 to twelve in 1988, and we have plans for additional staff even now. We have insurance professionals who can provide efficient and cost-effective

answers to your medical liability insurance questions. We serve more than 1800 Mississippi doctors – providing savings and financial strength through a program of sound investments and underwriting guidelines. Every claim is reviewed by a panel of medical and legal claims experts.

So call or come visit our staff at our offices on Riverside Drive. Let us show you *our* strength in numbers.



Medical Assurance Company of Mississippi

Street Address: Suite 301
735 Riverside Drive, Jackson, MS
Phone: (601) 353-2000

Mailing Address: P.O. Box 4915, Jackson, MS 39216-0915
MS WATS: 1-800-325-4172

JOURNAL

OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION

JULY 1988

VOLUME XXIX

NUMBER 7

SCIENTIFIC

Chylothorax 191

W. Wilson Defore, Jr., M.D.

Radiological Seminar CCXLXI: 195

Hepatic Cavernous Hemangioma

Diagnosed by 99mTc Blood Pool

Scintigraphy

Jane A. Sanders, M.D.

SPECIAL ARTICLE

A Fairy Tale 201

Donald E. Cook, M.D.

EDITORIALS

Expressions of Concern and 206

Direction

David R. Steckler, M.D.

Consultation Service Could Resolve 207

Differences, Benefit Patients

Myron W. Locky, M.D.

DEPARTMENTS

News 209

Medico-Legal Brief 219

Personals 213

New Members 217

Placement Service 222

EDITOR

Myron W. Locky, M.D.

EDITOR EMERITUS

W. Moncure Dabney, M.D.

ASSOCIATE EDITORS

George E. Abraham, M.D.

Joseph E. Johnston, M.D.

MANAGING EDITOR

Patsy Silver

PUBLICATIONS COMMITTEE

Richard C. Miller, M.D.,

Chairman

George H. Martin, M.D.

William J. Gibson, M.D.

and the editors

THE ASSOCIATION

David R. Steckler, M.D.

President

J. Ed Hill, M.D.

President-Elect

Don Q. Mitchell, M.D.

Secretary-Treasurer

James C. Waites, M.D.

Speaker

H. Vann Craig, M.D.

Vice Speaker

Charles L. Mathews

Executive Director

Copyright© 1988, Mississippi State Medical Association. The views expressed in this publication reflect the opinions of the authors and do not necessarily state the opinions or policies of the Mississippi State Medical Association.

THE JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION (ISSN 0026-6393) is owned and published monthly by the Mississippi State Medical Association, founded 1856, at 735 Riverside Drive, Jackson, Mississippi 39202. Subscription rate, \$25.00 per annum; \$35.00 per annum for foreign subscriptions; \$2.25 per copy, as available. Advertising rates furnished on request. Printed by The Ovid Bell Press, Inc., Fulton, Missouri. Second-class postage paid at Jackson, Mississippi, and at additional mailing offices. POSTMASTER: Send address changes to Mississippi State Medical Association, P.O. Box 5229, Jackson, Mississippi 39216.



James E. Smith graduated from St. Stanislaus in 1945. He went on to serve as president of T. Smith & Son, Inc. of New Orleans as well as the Dock Board.

"The sense of moral values instilled in me at St. Stanislaus has been the cornerstone of my whole adult life."

To the Brothers of the Sacred Heart, every student is a potential leader. And giving him the proper example—spiritual, intellectual and moral—is our mission at St. Stanislaus.

BOARDING SCHOOL GRADES 6-12
SUMMER CAMP AGES 9-14

304 South Beach Blvd. Bay St. Louis, MS 39520

SAINT STANISLAUS



St. Stanislaus helps build leaders.

FOR A FREE BROCHURE CALL THE DIRECTOR OF ADMISSIONS—(601) 467-9057.

NEWSLETTER

July 1988

Dear Doctor:

The provision of medical care to the underserved, underprivileged and financially needy is perhaps the most perplexing problem confronting the medical profession today, says a commentary in the June 3 issue of JAMA. "The need to ensure access to medical care for all those in need has been exacerbated by the economy, a competitive health care environment, and an escalating national debt," said the author, James E. Davis, M.D., AMA president. He called upon the private and public sectors to form a true partnership in seeking creative solutions to the problem of providing care for the needy.

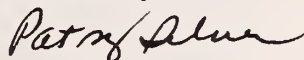
MSMA members in the Golden Triangle and North Delta areas of the state now have the opportunity to volunteer for such a program. MSMA, in cooperation with the Mississippi Council on Aging, has developed Senior Care, a program to assist the elderly who cannot afford the medical care they need.

Senior Care, endorsed by the Board of Trustees and the House of Delegates, will identify needy Medicare beneficiaries and primary care physicians who have voluntarily agreed to accept assignment for the medical services they furnish to these beneficiaries. Eligibility will be determined by local Agency on Aging representatives. To qualify for a Senior Care card, a senior citizen must have an annual income less than \$6,875 (or \$9,250 for a couple.)

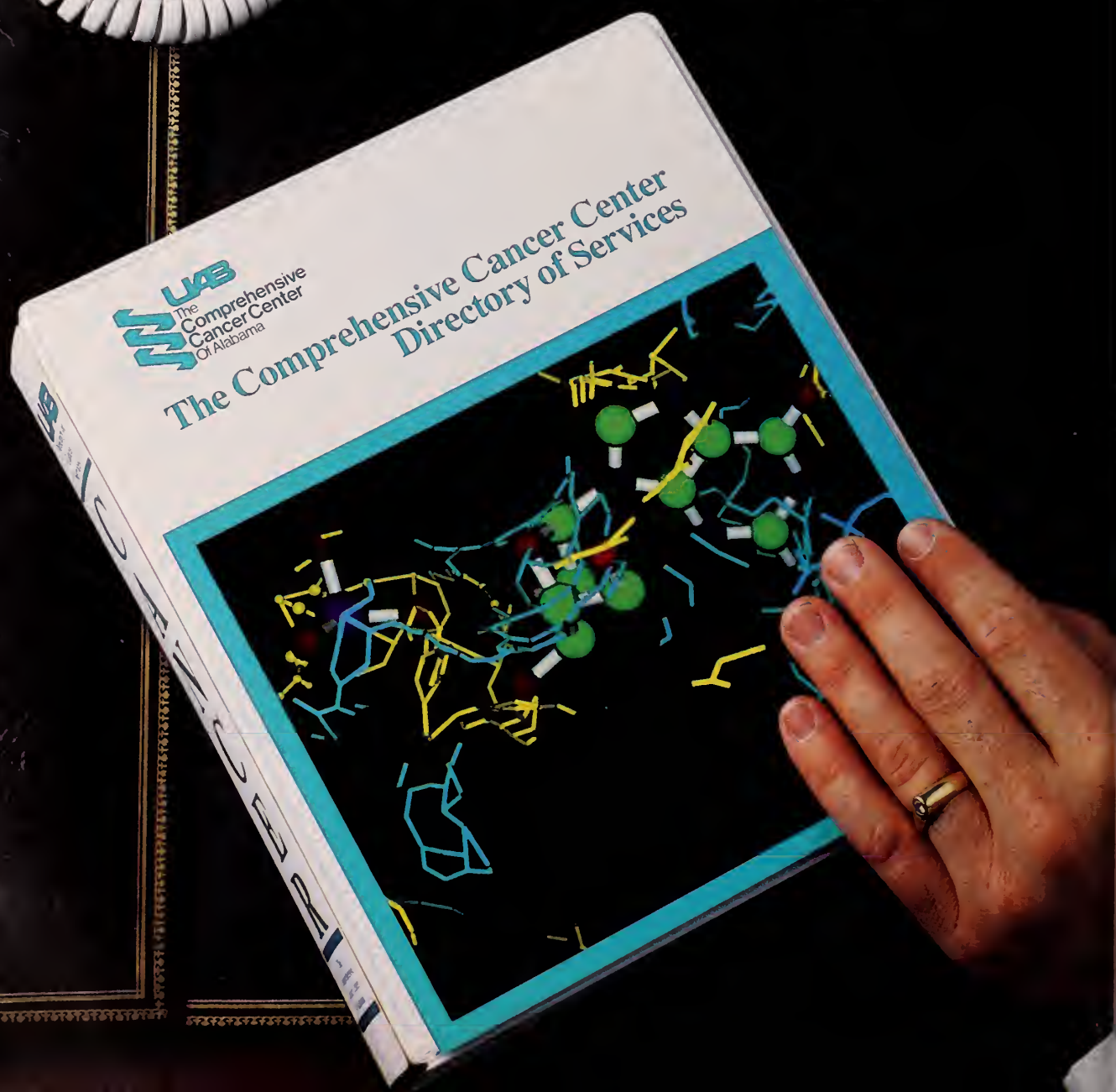
One of the fastest growing groups of AMA members is osteopathic physicians. Although the total number of osteopaths is small (2,287 members in 1987), it has nearly doubled since 1984, according to the AMA Division of Membership.

Watch for the complete report on MSMA's 120th Annual Session, including a message by Dr. Lamar Weems, your 1987-88 president, in next month's Journal MSMA.

Sincerely,



Patsy Silver
Managing Editor



CANCER?

We Have a Number of Answers...

The Directory of Cancer Services will assist you in obtaining the cancer services you need for your patients through the Comprehensive Cancer Center of Alabama at UAB. The Directory describes:

- Consultative Services
- Screening and Detection Programs, such as the Breast Evaluation Unit.
- Diagnostic Capabilities, such as monoclonal antibody imaging and chromosomal evaluation of leukemic cells.
- Treatment Modalities, such as chemotherapeutic agents and biologic response modifiers which are unavailable to the general public.
- Rehabilitation Services
- Specialty Services
- Research Programs

You'll also find information on physician services; inpatient and outpatient facilities and services; and professional background information, telephone number and major areas of interest of the UAB Medical Staff physicians providing clinical cancer services.

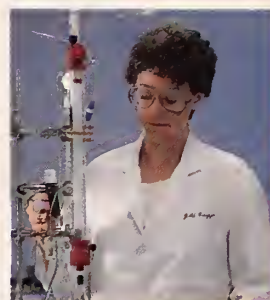
The Directory of Cancer Services will be sent to you free of charge. To receive your copy, just fill in and return the attached coupon or call the toll-free MIST number. **MIST 1-800-452-9860**



Radiation



Surgery



Research



☒ **YES!** Please send me a Directory of Cancer Services.

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone Number: (_____) _____

Mail to: University of Alabama Hospital
Administrative Services Building
2009 Sixth Avenue South
Birmingham, Alabama 35233



“When I realized my chances of becoming disabled by age 65 were *three times greater* than the chances of death . . .

I compared disability insurance plans. And I decided that my MSMA-endorsed disability insurance plan

SERVES ME BEST!

It's not group insurance, but an individually-owned policy which is *non-cancellable* and *guaranteed renewable*.”

If you're a member of the Mississippi State Medical Association you may be eligible for this outstanding professional disability plan at *discounted premiums*.

- Non-cancellable, guaranteed renewable
- Medical specialty protection
- Presumptive loss provision
- Indexing of prior earnings
- Waiver of premium
- Cost of living rider
- Future disability insurance option
- Lifetime accident and sickness rider
- Total and residual disability protection

Offered by Paul Revere Insurance Company to MSMA members through its exclusive representatives, Professional Disability Specialists.

Jon B. Wimbish, Disability Specialist

1501 Lakeland Drive, Suite 200

Jackson, MS 39216

Telephone 362-9800

DATELINE

Hospital Executives Describe Vulnerability

New York, NY - Of 1400 hospital executives responding to a Touche Ross survey, 48% say their institutions are vulnerable to failure

within five years. If these predictions are accurate, 680 hospitals from the survey sample alone may close their doors within five years, says the summary. In the past two years 150 hospitals have closed. Most vulnerable are small, rural and government-owned hospitals.

Grant Program Helps Train Geriatricians

New York, NY - Ten medical centers will be receiving grant support from the Hartford Foundation for the purpose of attracting

greater numbers of young and mid-career physicians to the field of academic geriatrics. The \$3 million initiative is described as an effort to close the "alarming gap" between the growing need for geriatricians and the current supply of qualified faculty members and researchers to train them.

Modify Questions To Determine Alcoholism

Chicago, IL - Adding two questions when taking routine medical histories can more effectively detect alcoholism. Traditional

questions such as "How much do you drink?" and "How often do you drink?" were found to be poor indicators of alcohol abuse. By asking "Have you ever had a drinking problem?" and "When was your last drink?" researchers in a Brown University study gained a 91.5% sensitivity rate in detecting alcoholism.

Study Suggests Need For Radiotherapy Follow-Up

Chicago, IL - A study in the June 17 JAMA indicates a marked shift toward breast-conserving surgery for women with localized

breast cancer, but suggests that many women, especially those over 65, may not be receiving follow-up radiation therapy. In a study of 6,000 women (New Mexico Tumor Registry) the authors could not confirm post-surgery radiotherapy for 56% of women aged 65 and older and for 26% of those under 65.

Report Gives Physician Population Projections

Chicago, IL - Trends indicate that the number of active physicians in the U.S. will increase by 21.9% by the year 2000,

says a report from the AMA Center for Health Policy Research. The study projects that the active physician population will increase from 519,000 in 1986 to 633,000 by 2000. The number of female physicians will increase by 91.9%; internal medicine will remain the most heavily populated specialty.

Counsel to Authors

THE JOURNAL welcomes manuscripts which should be submitted to the Editors at 735 Riverside Drive, Jackson, MS 39216, in original and at least one duplicate copy. They must be typewritten double spaced on 8½ by 11-inch white paper. **Brief manuscripts (about 2,500 words or 8 pages) will be given preference over longer articles.**

The author is responsible for all statements made in his work, including changes made by the manuscript editor. Manuscripts are received with the understanding that they are not under simultaneous consideration by any other publication and have not been previously published. All manuscripts will be acknowledged, and while those rejected are generally returned to the author, the JOURNAL is not responsible in event of loss. Manuscripts accepted for publication become the property of the JOURNAL and are copyrighted by the association when published. They may not be published elsewhere without written release and permission from both the JOURNAL and the author.

All copy must be double spaced, including legends, footnotes, and references. Generous margins at the top, bottom, and on both sides of the page should be allowed. Each page after the title page should be consecutively numbered and carry a running head identifying the paper and author.

Titles should be short, specific, and clear. Ordinarily, a title should not exceed 80 characters, including punctuation.

References should be limited to a maximum of 10. If there are more than 10, the references will be omitted and a notation made to write the author for a complete list. Textbooks, personal communications, and unpublished data may not be cited as references. References must include names of authors, complete title cited, name of journal or book spelled out or abbreviated according to the *Index Medicus*, volume number, first and last page numbers, month, date (if published more frequently than monthly), and year. References should be arranged according to order listed in the text and must be numbered consecutively.

Manuscripts accepted for publication are subject to copy editing. Authors will receive galley proof prior to publication. Galley proof is only for correction of errors, and text changes

may not be made. The galley proof should be returned by the author within 48 hours from receipt, and no further changes may be made.

Illustrations consist of all material which cannot be set into type such as photographs, line drawings, graphs, charts, and tracings. Illustrations should be submitted separately from text copy. Figures and drawings should be professionally prepared with black ink on white paper. Photographs should be of high resolution, unmounted, untrimmed, glossy prints. Each must be clearly identified. No charges are made to authors for up to four illustration engravings. More are not permitted unless voted on by two editors and extra costs must be absorbed by the author.

Illustrations must be numbered and cited in the text. Legends, not exceeding 40 words and preferably shorter, must accompany each illustration, typed double spaced on separate sheets. The following information should appear on a gummed label affixed to the back of each illustration: Figure number, manuscript title, author's name, and arrow indicating top of the illustration.

In photographs in which there is any possibility of personal identification, an acceptable legal release must accompany the material.

A thesis summary of 75 to 100 words must accompany each manuscript.

Reprints may be obtained at cost plus shipping charges from the association and **should be ordered prior to publication.** The JOURNAL reserves the right to decline any manuscript. Authors should avoid placing subheads in the text, and the Editors reserve the prerogative of writing and inserting subheads according to JOURNAL style. — *The Editors.*

In addition, in view of *The Copyright Revision Act of 1976*, effective Jan. 1, 1978, transmittal letters to the editor should contain the following language: "In consideration of the Mississippi State Medical Association's taking action in reviewing and editing my submission, the author(s) undersigned hereby transfers, assigns, or otherwise conveys all copyright ownership to the MSMA in the event that such work is published by the MSMA." We regret that transmittal letters not containing the foregoing language signed by *all* authors of the submission will necessitate delay in review of the manuscript. — *The Editors.*



ALLAN J. HAMILTON, M.D.

Neurosurgical Resident and Research Fellow,
Massachusetts General Hospital, Boston, Massachusetts.
Captain, U.S. Army Reserve.

EDUCATION Ithaca College, B.A. (Magna Cum Laude);
Hamilton College (Pre-med); Harvard Medical School.

RESIDENCY General Surgical Internship. Neurosurgical
Residency, Massachusetts General Hospital.

CONTINUING EDUCATION Neurology and Neuro-
surgery Research Fellowship Training, National Institutes
of Health.

OUTSTANDING ACHIEVEMENTS Olsen Memorial
Fellowship, National Masonic Medical Research Foundation;
Albert Schweitzer Fellowship, International Albert Schweitzer
Foundation; Harvard Medical School Cabot Prize for Best
Senior Thesis; recently published article, "Who Shall Live
and Who Shall Die" in Newsweek Magazine.

“The work I’m doing in the Army Reserve fits perfectly with my academic research interests in civilian life. The Army is very concerned with the effects of high-altitude cerebral edema, which is a mirror model of cerebral hypoxia, something I deal with every day in our neurosurgical intensive care unit. I couldn’t ask for a smoother transition. And that’s true for a lot of Reserve physicians. All we really do is change our clothes, not our mindset.

“Some of the projects the Army is undertaking are on the cutting edge of research. For example, I’m currently involved in developing for the Army a prototype of a non-invasive intracranial pressure-monitoring device that we hope will allow us to measure pressure changes as the brain swells — without drilling holes in the skull. If we can get our design to work, such a device could revolutionize high-altitude medicine as well as civilian neurosurgical care.

“The quality of medicine and the caliber of people I’ve been associated with in the Army Reserve are, without question, equal to civilian hospitals. In fact, I’m giving serious consideration to applying for an active duty academic position in Army Medicine when my residency ends at Massachusetts General.”

Find out more about the medical opportunities in the Army Reserve. Call toll free 1-800-USA-ARMY.



Soldier being examined for effects of high-altitude cerebral edema.

**ARMY RESERVE MEDICINE.
BE ALL YOU CAN BE.**

A better alternative for hypertensives who are going bananas...

Spare your patients the extra cost—
in calories, sodium and dollars.

Spare your patients the rigors of
dietary K⁺ supplementation.

DYAZIDE[®]

25mg Hydrochlorothiazide/50mg Triamterene/SKF

Effective antihypertensive*
therapy...without
the bananas

DAW
'DYAZIDE' AS WRITTEN.

* Not for initial therapy. See brief summary.

Before prescribing, see complete
prescribing information in
SK&F CO. literature or PDR.
The following is a brief summary.

* WARNING

This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

Contraindications: Concomitant use with other potassium-sparing agents such as spironolactone or amiloride. Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K⁺ levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K⁺ intake. Associated widened QRS complex or arrhythmia requires prompt additional therapy. Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available. Sensitivity reactions may occur in patients with or

without a history of allergy or bronchial asthma. Possible exacerbation or activation of systemic lupus erythematosus has been reported with thiazide diuretics.

Precautions: The bioavailability of the hydrochlorothiazide component of 'Dyazide' is about 50% of the bioavailability of the single entity. Theoretically, a patient transferred from the single entities of triamterene and hydrochlorothiazide may show an increase in blood pressure or fluid retention. Similarly, it is also possible that the lesser hydrochlorothiazide bioavailability could lead to increased serum potassium levels. However, extensive clinical experience with 'Dyazide' suggests that these conditions have not been commonly observed in clinical practice. Angiotensin-converting enzyme (ACE) inhibitors can elevate serum potassium; use with caution with 'Dyazide'. Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids, and during concurrent use with amphotericin B or corticosteroids or corticotropin [ACTH]). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Cumulative effects of the drug may develop in patients with impaired renal function. Thiazides should be used with caution in patients with impaired hepatic function. They can precipitate coma in patients with severe liver disease. Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic and hemolytic anemia have been reported with thiazides. Thiazides may cause manifestation of latent diabetes mellitus. The effects of oral anticoagulants may be decreased when used concurrently with hydrochlorothiazide; dosage adjustments may be necessary. Clinically insignificant reductions in arterial responsiveness to norepinephrine have been reported. Thiazides have also been shown to increase the paralyzing effect of nondepolarizing muscle relaxants such as tubocurarine. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. Triamterene has been found in renal stones in association with the other usual calculus components. Therefore, 'Dyazide' should be used with caution in patients with histories of stone formation. A few occurrences of acute renal failure have been reported in patients on 'Dyazide' when treated with indomethacin. Therefore, caution is advised in administering nonsteroidal anti-inflammatory agents with 'Dyazide'. The

following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine. Hypokalemia is uncommon with 'Dyazide', but should it develop, corrective measures should be taken such as potassium supplementation or increased dietary intake of potassium-rich foods. Corrective measures should be instituted cautiously and serum potassium levels determined. Discontinue corrective measures and 'Dyazide' should laboratory values reveal elevated serum potassium. Chloride deficit may occur as well as dilutional hyponatremia. Concurrent use with chlorpropamide may increase the risk of severe hyponatremia. Serum PBI levels may decrease without signs of thyroid disturbance. Calcium excretion is decreased by thiazides. 'Dyazide' should be withdrawn before conducting tests for parathyroid function. Thiazides may add to or potentiate the action of other antihypertensive drugs. Diuretics reduce renal clearance of lithium and increase the risk of lithium toxicity.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances; postural hypotension (may be aggravated by alcohol, barbiturates, or narcotics). Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and respiratory distress including pneumonitis and pulmonary edema, transient blurred vision, sialadenitis, and vertigo have occurred with thiazides alone. Triamterene has been found in renal stones in association with other usual calculus components. Rare incidents of acute interstitial nephritis have been reported. Impotence has been reported in a few patients on 'Dyazide', although a causal relationship has not been established.

Supplied: 'Dyazide' is supplied as a red and white capsule, in bottles of 1000 capsules; Single Unit Packages (unit-dose) of 100 (intended for institutional use only); in Patient-Pak[™] unit-of-use bottles of 100.

BR8-DZ-L45

a product of
SK&F CO.
Citra, P.R. 00639

SK&F Co., 1987



WHEN YOUR PATIENT NEEDS PHYSICAL REHABILITATION, YOU WANT HIM IN THE BEST OF HANDS. YOURS AND OURS.

When your patients need physical rehabilitation, you want them to be treated by a comprehensive system that is structured to meet their needs at each stage of recovery.

That means Lakeshore System Services, with almost 20 years experience in rehabilitation. We can give your patients the advantages of an experienced team of rehabilitation professionals, state-of-the-art facilities, and proven programs that help each patient reach his potential.

Importantly, when your patients are under our care, we always remember they're under your care, too. We encourage your involvement in the treatment process and keep you updated on your patient's progress.

One way you can assure that a Lakeshore facility is always available to your patients is to be our partner.

We can tailor a partnership to fit the situation, perhaps with you, a hospital in your community, and other physicians. If the potential is there, we have the managing and marketing expertise to make it succeed in every way.

Please call us for information, at (205) 868-2005. It could be one of the best things you can do for your patients. And for you.



3800 Ridgeway Drive,
Birmingham, AL 35209.

MSMA's 121st Annual Session

May 31-June 4, 1989

Mark your calendar now

A NEW H₂ Antagonist

AXID[®] 300mg

nizatidine

Effective once-nightly
duodenal ulcer therapy available in a
Unique Convenience Pak
for better patient compliance



AXID[®] nizatidine capsules

Brief Summary. Consult the package insert for prescribing information.

Indications and Usage: Axid is indicated for up to eight weeks for the treatment of active duodenal ulcer. In most patients, the ulcer will heal within four weeks.

Axid is indicated for maintenance therapy for duodenal ulcer patients, at a reduced dosage of 150 mg b.i.d. after healing of an active duodenal ulcer. The consequences of continuous therapy with Axid for longer than one year are not known.

Contraindication: Axid is contraindicated in patients with known hypersensitivity to the drug and should be used with caution in patients with hypersensitivity to other H₂-receptor antagonists.

Precautions: General—1. Symptomatic response to nizatidine therapy does not preclude the presence of gastric malignancy.

2. Because nizatidine is excreted primarily by the kidney, dosage should be reduced in patients with moderate to severe renal insufficiency.

3. Pharmacokinetic studies in patients with hepatorenal syndrome have not been done. Part of the dose of nizatidine is metabolized in the liver. In patients with normal renal function and uncomplicated hepatic dysfunction, the disposition of nizatidine is similar to that in normal subjects.

Laboratory Tests: False-positive tests for urobilinogen with Multistix[®] may occur during therapy with nizatidine.

Drug Interactions: No interactions have been observed between Axid and theophylline, chlorazepoxide, lorazepam, lidocaine, phenyltol, and warfarin. Axid does not inhibit the cytochrome P-450-linked drug-metabolizing enzyme system, therefore, drug interactions mediated by inhibition of hepatic metabolism are not expected to occur. In patients given very high doses (3,900 mg) of aspirin daily, increases in serum salicylate levels were seen when nizatidine, 150 mg b.i.d., was administered concurrently.

Carcinogenesis, Mutagenesis, Impairment of Fertility: A two-year oral carcinogenicity study in rats with doses as high as 500 mg/kg/day (about 80 times the recommended daily therapeutic dose) showed no evidence of a carcinogenic effect. There was a dose-related increase in the density of enterochromaffin-like (ECL) cells in the gastric oxyntic mucosa. In a two-year study in mice, there was no evidence of a carcinogenic effect in male mice, although hyperplastic nodules of the liver were increased in the high dose males compared to placebo. Female mice given the high dose of Axid (2,000 mg/kg/day, about 330 times the human dose) showed marginally statistically significant increases in hepatic carcinoma and hepatic nodular hyperplasia with no numerical increase seen in any of the other dose groups. The rate of hepatic carcinoma in the high dose animals was within the historical control limits seen for the strain of mice used. The female mice were given a dose larger than the maximum tolerated dose, as indicated by excessive (30%) weight decrement

compared to concurrent controls, and evidence of mild liver injury (transaminase elevations). The occurrence of a marginal finding at high dose only in animals given an excessive, and somewhat hepatotoxic dose, with no evidence of a carcinogenic effect in rats, male mice, and female mice (given up to 360 mg/kg/day, about 60 times the human dose), and a negative mutagenicity battery is not considered evidence of a carcinogenic potential for Axid.

Axid was not mutagenic in a battery of tests performed to evaluate its potential genetic toxicity, including bacterial mutation tests, unscheduled DNA synthesis, sister chromatid exchange, and the mouse lymphoma assay.

In a two-generation, perinatal and postnatal, fertility study in rats, doses of nizatidine up to 650 mg/kg/day produced no adverse effects on the reproductive performance of parental animals or their progeny.

Pregnancy—Fetalogic Effects: Pregnancy Category C—Oral reproduction studies in rats at doses up to 300 times the human dose, and in Dutch Belled rabbits at doses up to 55 times the human dose, revealed no evidence of impaired fertility or teratogenic effect, but, at a dose equivalent to 300 times the human dose, treated rabbits had abortions, decreased number of live fetuses, and depressed fetal weights. On intravenous administration to pregnant New Zealand White rabbits, nizatidine at 20 mg/kg produced cardiac enlargement, coarctation of the aortic arch, and cutaneous edema in one fetus and at 50 mg/kg it produced ventricular anomaly, distended abdomen, spina bifida, hydrocephaly, and enlarged heart in one fetus. There are, however, no adequate and well-controlled studies in pregnant women. It is also not known whether nizatidine can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Nizatidine should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers: Nizatidine is secreted and concentrated in the milk of lactating rats. Pups reared by treated lactating rats had depressed growth rates. Although no studies have been conducted in lactating women, nizatidine is assumed to be secreted in human milk, and caution should be exercised when nizatidine is administered to nursing mothers.

Pediatric Use: Safety and effectiveness in children have not been established. **Use in Elderly Patients:** Ulcer healing rates in elderly patients are similar to those in younger age groups. The incidence rates of adverse events and laboratory test abnormalities are also similar to those seen in other age groups. Age alone may not be an important factor in the disposition of nizatidine. Elderly patients may have reduced renal function.

Adverse Reactions: Clinical trials of nizatidine included almost 5,000 patients given nizatidine in studies of varying durations. Domestic placebo-controlled trials included over 1,900 patients given nizatidine and over 1,300 given placebo. Among the more common adverse events in the domestic placebo-controlled trials, sweating (1% vs 0.2%), urticaria (0.5% vs <0.01%), and somnolence (2.4% vs 1.3%) were significantly more common in the nizatidine group. A variety of less common events was also reported; it was not possible to

determine whether these were caused by nizatidine.

Hepatic: Hepatocellular injury, evidenced by elevated liver enzyme tests (SGOT [AST], SGPT [ALT], or alkaline phosphatase), occurred in some patients possibly or probably related to nizatidine. In some cases, there was marked elevation of SGOT, SGPT enzymes (greater than 500 IU/L), and in a single instance, SGPT was greater than 2,000 IU/L. The overall rate of occurrences of elevated liver enzymes and elevations to three times the upper limit of normal, however, did not significantly differ from the rate of liver enzyme abnormalities in placebo-treated patients. All abnormalities were reversible after discontinuation of Axid.

Cardiovascular: In clinical pharmacology studies, short episodes of asymptomatic ventricular tachycardia occurred in two individuals administered Axid and in three untreated subjects.

Endocrine: Clinical pharmacology studies and controlled clinical trials showed no evidence of antiandrogenic activity due to Axid. Impotence and decreased libido were reported with equal frequency by patients who received Axid and by those given placebo. Rare reports of gynecomastia occurred.

Hematologic: Fatal thrombocytopenia was reported in a patient who was treated with Axid and another H₂-receptor antagonist. On previous occasions, this patient had experienced thrombocytopenia while taking other drugs.

Integumental: Sweating and urticaria were reported significantly more frequently in nizatidine than in placebo patients. Rash and exfoliative dermatitis were also reported.

Other: Hyperuricemia unassociated with gout or nephrolithiasis was reported.

Overdosage: There is little clinical experience with overdosage of Axid in humans. If overdosage occurs, use of activated charcoal, emesis, or lavage should be considered along with clinical monitoring and supportive therapy. Renal dialysis for four to six hours increased plasma clearance by approximately 84%.

Test animals that received large doses of nizatidine have exhibited cholinergic-type effects, including lacrimation, salivation, emesis, miosis, and diarrhea. Single oral doses of 800 mg/kg in dogs and of 1,200 mg/kg in monkeys were not lethal. Intravenous LD₅₀ values in the rat and mouse were 301 mg/kg and 232 mg/kg respectively.

Axid[®] (nizatidine, Lilly)



Eli Lilly and Company
Indianapolis, Indiana
46285

NZ-2903-B-849356

© 1988, ELI LILLY AND COMPANY

Axid[®] (nizatidine, Lilly)

ORIGINAL PAPERS

Chylothorax

W. WILSON DEFORE, JR., M.D.

Jackson, Mississippi

CHYLOTHORAX IS AN ABNORMAL accumulation of chyle in the pleural space resulting from disruption of the thoracic duct due to tumors or trauma. Chyle contains a high content of proteins and fats, and may present serious nutritional problems to the patient, as well as respiratory embarrassment due to the volume of the effusion. Conservative treatment is the initial therapy, followed by surgical intervention if these measures are not effective. A typical case of chylothorax is presented along with the discussion of the clinical spectrum of this unusual pleural effusion.

Case Report

LBH, an 84-year-old white male, entered the hospital for evaluation of increasing dyspnea and right-sided chest discomfort of 3-weeks duration. The patient gave no other significant cardiorespiratory symptoms. On physical examination, there were markedly decreased breath sounds over the right hemithorax and dullness to percussion.

The chest x-ray upon admission revealed a massive right-sided pleural effusion. A right tube thoracotomy was performed with removal of 4,000 milliliters of milky-colored fluid resembling chyle. The fluid was sent for routine analysis, including cytology, chemistries, and cultures. A Sudan III fat stain was positive, and it was therefore concluded that the fluid accumulation represented a chylothorax.

Chylothorax is a collection of chyle in the pleural space. It most commonly results from trauma or malignancy. Initial conservative therapy includes intercostal tube decompression of the pleural effusion, along with dietary decompression of the thoracic lymphatics utilizing total parenteral nutrition or an oral medium-chain triglyceride diet. If the above measures fail after two to three weeks, an open thoracotomy with proximal and distal ligation of the thoracic duct at the site of leakage should be effective. If the continuing drainage is secondary to a malignancy, surgery may not be effective, and chemical pleurodesis along with irradiation therapy may be tried. Efforts must be taken to avoid nutrition depletion of the patient due to the large loss of nutritional ingredients from the chyle.

There was no history of trauma given by the patient or his family, and attention was focused on investigation of a possible malignancy as the etiology of the chylothorax. A CT scan of the chest and abdomen were both unremarkable. A fiberoptic bronchoscopy was performed, and no lesions were visualized in the tracheobronchial tree. All specimens obtained for cytology were negative for malignant cells. A bone marrow biopsy was obtained to rule out a possible lymphomatous process, and this was likewise normal.

The patient was treated with tube thoracostomy drainage and started on a medium-chain triglyceride

Dr. Defore is engaged in the private practice of general, thoracic, and cardiovascular surgery in Jackson, MS.

diet in an attempt to decrease the continuing right pleural drainage. However, dietary therapy failed to appreciably decrease the drainage, which averaged approximately 350 milliliters a day, and the patient's total serum protein level dropped to 4.8 grams. Therefore, the patient was restricted from oral intake, and started on total parenteral nutritional therapy in an effort to avoid surgical intervention in this elderly patient.

Over the next few days with hyperalimentation, the right pleural drainage slowly decreased. At this time, a chemical pleurodesis of the right pleural space utilizing a tetracycline sclerosing solution was performed in an attempt to obliterate the potential space between the visceral and parietal pleura, and thus hopefully avoid reaccumulation of the chylous fluid. The patient was then progressed to an elemental diet without recurrence of the right pleural effusion, and the chest tube was removed. The patient made good progress, and no other complications were encountered.

Discussion

Chylothorax implies a rare pleural effusion, high in lipid content, secondary to leakage of chyle from the ruptured thoracic duct into the involved pleural space. Chyle is a milky emulsion of fat particles and lymph formed in the small bowel during digestion. Chylothorax usually occurs secondary to trauma or neoplasms as a result of a fistulous communication into the thoracic space.

The origin of the thoracic duct is the cisterna chyli, which is formed by the union of two lumbar lymphatic trunks and the intestinal trunk. It is located anterior to the 12th thoracic or first two lumbar vertebrae in the abdomen. The thoracic duct then passes through the diaphragm by way of the aortic hiatus. Upon entrance into the chest, it is retroesophageal, and to the right of the midline. The thoracic duct then continues upward in the thoracic space anterior to the vertebrae and then crosses the midline to the left side of the midthoracic region. Valves are present which allow chyle to flow only superiorly throughout the length of the thoracic duct. The thoracic duct then arches above the level of the medial end of the left clavicle, and usually anterior to the subclavian artery, to terminate into one or more branches in the left subclavian or left internal jugular vein. The chyle formed in the cisterna chyli is an odorless, white opaque liquid. Analysis of chyle reveals approximately 90% lymphocytes, and

a white blood cell count of 2,000 to 20,000 cells per cubic millimeter, which generally renders this fluid bacteriostatic. Chemical analysis reveals a protein content of 1 to 7 grams percent and fat globules are present which stain with Sudan III dyes. The fat content generally ranges from 4 to 5%. Chyle is also alkaline with a specific gravity of greater than 1.012 and will settle on standing with the fat-rich portion on the top, and a cellular sediment on the bottom. Chyle is noted to be high in neutral fats and fatty acids, but low in cholesterol. Chyle is largely fat and protein and significant losses may result in severe nutritional depletion, especially hypoproteinemia.

The etiology of chylothorax includes idiopathic effusions which account for 33%. However, the most common causes of chylothorax are neoplasms and trauma. Neoplasms are most commonly those of lymphomatous disease. Traumatic injuries may follow penetrating injuries such as gunshot wounds or stab wounds, or non-penetrating causes such as spinal fractures, episodes of vigorous coughing, or spinal hyperextension. In addition, chylothorax may be associated with postsurgical trauma. The thoracic duct crosses to the left of the spine between T-5 and T-7, and is therefore vulnerable to traumatic injury during surgery on the left hemithorax near the hilum. Thoracic duct injuries are also seen in children undergoing surgery for congenital heart disease. Obstructions of the thoracic duct by lymphoma or bronchogenic carcinoma tend to cause a right-sided chylothorax when the lower portion of the duct is invaded, whereas a left-sided chylothorax results when the upper portion of the duct is affected. Rarer causes of chylothorax include tuberculosis, congenital anomalies of the lymphatics, retroperitoneal lymphoma, obstruction of the thoracic duct by filarial parasites, post inflammatory scarring, multiple lymphangiomata of the bone, lymphangiomyomatosis, mediastinal fibrosis and thrombosis of the great veins.

The symptoms of chylothorax are due to pulmonary compression with resultant dyspnea, in addition to malnutrition, secondary to fat and protein depletion. The diagnosis of chylothorax should be considered when there is a pleural effusion of a milky character in association with a known thoracic malignancy or following trauma in which the thoracic duct may have been injured. Chyle may appear in the pleural space after a lapse period of several days, or even months, but it is not usually immediately noted. Approximately 50% of the effusions are located on the right side, 25% on the left, and 25% are bilateral. The diagnosis of chylothorax is

initially obtained with thoracentesis to obtain fluid for simultaneous determinations of the fat and protein content of the chyle and plasma. Chyle is the only fluid in the body having a fat content greater than that of plasma, and a protein content is approximately half of that of plasma. Analysis of fast-ing samples of serum and pleural fluid by lipopro-tein electrophoresis and fat staining may also be helpful. In addition, there is noted to be a decrease in the total serum proteins, and a peripheral blood smear with decreased lymphocytes and eosinophils. A chest x-ray shows a typical massive pleural ef-fusion usually on the right side. If operative therapy is contemplated, a lymphangiogram may be ob-tained.

The treatment of chylothorax is dictated by the underlying etiology. Initial diagnosis and manage-ment is with thoracentesis to obtain fluid for anal-ysis. However, the chylous effusion will usually recur promptly after initial needle drainage, and therefore a closed tube thoracostomy is usually more effective for re-expansion of the lung, and possible sealing off of the lymphatic channels. One must monitor closely the loss of nutritional ingredients in the chyle including fat, proteins, fluids, and fat-

soluble vitamins. An effort must be made to de-crease the flow of chyle by way of various modal-ities, including the restriction of oral fluids and foods, occasional nasogastric suction, decreased physical activity with elevation of the head of the bed, and measures to decrease the intra-abdominal pressure. Initially, the patient may be started on a medium-chain triglyceride diet which has the advantage of being absorbed into the portal vein and thus enters the circulatory system rather than traveling by way of the thoracic duct. If this modality should be in-effective, the patient should then have oral intake restricted and started on total parenteral nutrition. If the patient continues to have drainage, a thora-cotomy with proximal and distal ligation of the in-volved component of the thoracic duct should be performed after 2 to 3 weeks. However, the length of time before surgery should be a matter of medical judgment according to the patient's progress, rather than a set arbitrary time period. In patients with proved malignancy, such as lymphoma or metastatic carcinoma, irradiation therapy and chemical pleu-rodosis of the involved hemithorax should be per-formed. ★★★

514-A E. Woodrow Wilson (39216)

PRINTING — OFFICE SUPPLIES

EQUIPMENT — FURNITURE



Premier Printing Company

2485 West Capitol

Jackson, Mississippi

Phone 352-4091

THE ARMY RESERVE OFFERS NEW FINANCIAL INCENTIVES FOR RESIDENTS.



If you are a resident in Anesthesiology or Surgery*, the Army Reserve has a new and exciting opportunity for you. The new Specialized Training Assistance Program will provide you with financial incentives while you're training in one of these specialties.

Here's how the program can work for you. If you qualify, you may be selected to participate in the Specialized Training Program. You'll serve in a local Army Reserve medical unit with flexible scheduling so it won't interfere with your residency

training, and in addition to your regular monthly Reserve pay, you'll receive a stipend of \$644 a month.

You'll also have the opportunity to practice your specialty for two weeks a year at one of the Army's prestigious Medical Centers.

Find out more about the Army Reserve's new Specialized Training Assistance Program.

Call or write your US Army Medical Department Reserve Personnel Counselor:

**ARMY RESERVE MEDICINE
2100 6TH AVE. SOUTH
SUITE 303
BIRMINGHAM, AL 35205
(205) 930-9719 COLLECT**

* General, Orthopaedic, Neuro, Colon/Rectal, Cardio/Thoracic, Pediatric, Peripheral/Vascular, or Plastic Surgery.

ARMY RESERVE MEDICINE. BE ALL YOU CAN BE.

Radiological Seminar CCXXI: Hepatic Cavernous Hemangioma Diagnosed by ^{99m}Tc Blood Pool Scintigraphy

JANE A. SANDERS, M.D.

Jackson, Mississippi

THE INCIDENTAL finding of a solitary hepatic mass during abdominal sonography or radiocolloid liver scan creates a problem in differential diagnosis. Many of these masses will be hepatic cavernous hemangiomas, the most common benign liver tumor. Due to their marked vascularity, percutaneous biopsy of these lesions is a high-risk procedure. Hepatic blood pool imaging with ^{99m}Tc labeled red blood cells is a highly sensitive, reliable, and non-invasive diagnostic procedure to differentiate hepatic cavernous hemangiomas from other hepatic lesions.

Case Report

A 72-year-old male was admitted for an acute exacerbation of long-standing chronic obstructive pulmonary disease. During the work-up the patient was found to have an elevated BUN and creatinine and was referred for renal ultrasound. The kidneys appeared normal but incidental note was made of a moderate size, irregular mass in the inferior aspect of the right lobe of the liver.

The patient's liver function studies were normal and physical examination was normal. A liver/spleen scan demonstrated a large defect on the posterior surface of the liver. Because of the suspicion of a possible cavernous hepatic hemangioma, a tagged red blood cell liver scan was performed which showed a pattern consistent with hemangioma. This was verified by angiography.

Discussion

The unexpected finding of one or more hepatic

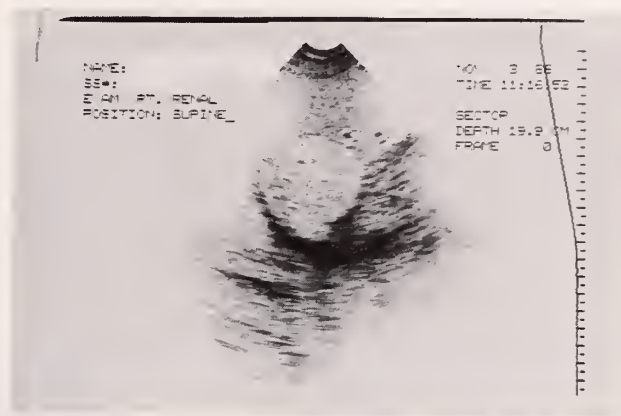


Figure 1. Solid hepatic mass detected incidentally on renal sonography.

lesions during a ^{99m}Tc radiocolloid liver scan or an abdominal sonographic examination performed for an unrelated problem in patients with no history of neoplasm may result in an extensive search to find the primary tumor. A more rational approach is to determine first whether the hepatic lesion might be a cavernous hemangioma.¹

Cavernous hemangioma is the second most common hepatic tumor exceeded in incidence only by hepatic metastases. It is the most common benign tumor of the liver representing about 0.4% to 7% of hepatic neoplasms. It occurs at all ages and in both sexes although there is a higher incidence in women. Hemangiomas are usually single but multiple tumors occur in about 10% of cases. The majority of hemangiomas found incidentally at laparotomy or autopsy are less than 5.0 cm in diameter. Those that are symptomatic are larger and may attain a diameter of 30 cm or more.²

Liver enzymes in patients with cavernous hemangioma in the absence of other liver disease are

Sponsored by the Mississippi Radiological Society.
From the Nuclear Medicine Service, VA Medical Center, Jackson, MS.

typically normal. In contrast 90% of patients with metastatic disease, hepatoma, or abscess have abnormal enzymes. Most hemangiomas remain asymptomatic but large lesions may cause pressure symptoms in adjacent organs. Thrombosis and spontaneous rupture are rare complications.³

Although hepatic hemangiomas have no malignant potential and usually require no treatment, they must be differentiated from other space-occupying hepatic masses such as hepatoma, abscess, cyst, hematoma, and metastasis. It is crucial to establish the diagnosis of hepatic cavernous hemangioma without percutaneous needle biopsy because of the propensity of this highly vascular tumor to bleed extensively.

Multiple imaging modalities are available to evaluate a suspected cavernous hemangioma, but the most effective overall appears to be blood-flow and blood-pool scintigraphy with ^{99m}Tc-labeled red blood cells. Scintigraphy is not as dependent on technique and interpretation as sonography, CT, and angiography. It is as safe as sonography and safer and less expensive than either angiography or CT.

The procedure is as follows: Red cell labeling is performed in the same manner as for a GI bleeding scan or gated heart scan, using 20mCi of ^{99m}Tc. Either the in vivo or modified in vivo methods are acceptable. The patient is positioned under a large field of view gamma camera equipped with a low-energy all-purpose parallel-hole collimator in the projection that best demonstrates the lesion as seen on radiocolloid scan or sonography. A flow study is acquired at 3 sec/frame for 30 seconds. Static images are obtained at 5, 10, 15, 20 and 30 minutes. Delayed imaging is then performed between 1-2 hours.

The scintigraphic findings of a cold defect on radiocolloid liver-spleen scan, a flow study showing decreased perfusion of the lesion, and an increase in activity in the lesion as compared to that of the surrounding liver on blood-pool study at intervals up to 1-2 hours is diagnostic of cavernous hemangioma. The discrepancy between radionuclide flow studies and blood-pool imaging probably reflects the sluggish flow within the vascular lakes of hepatic hemangiomas.⁴

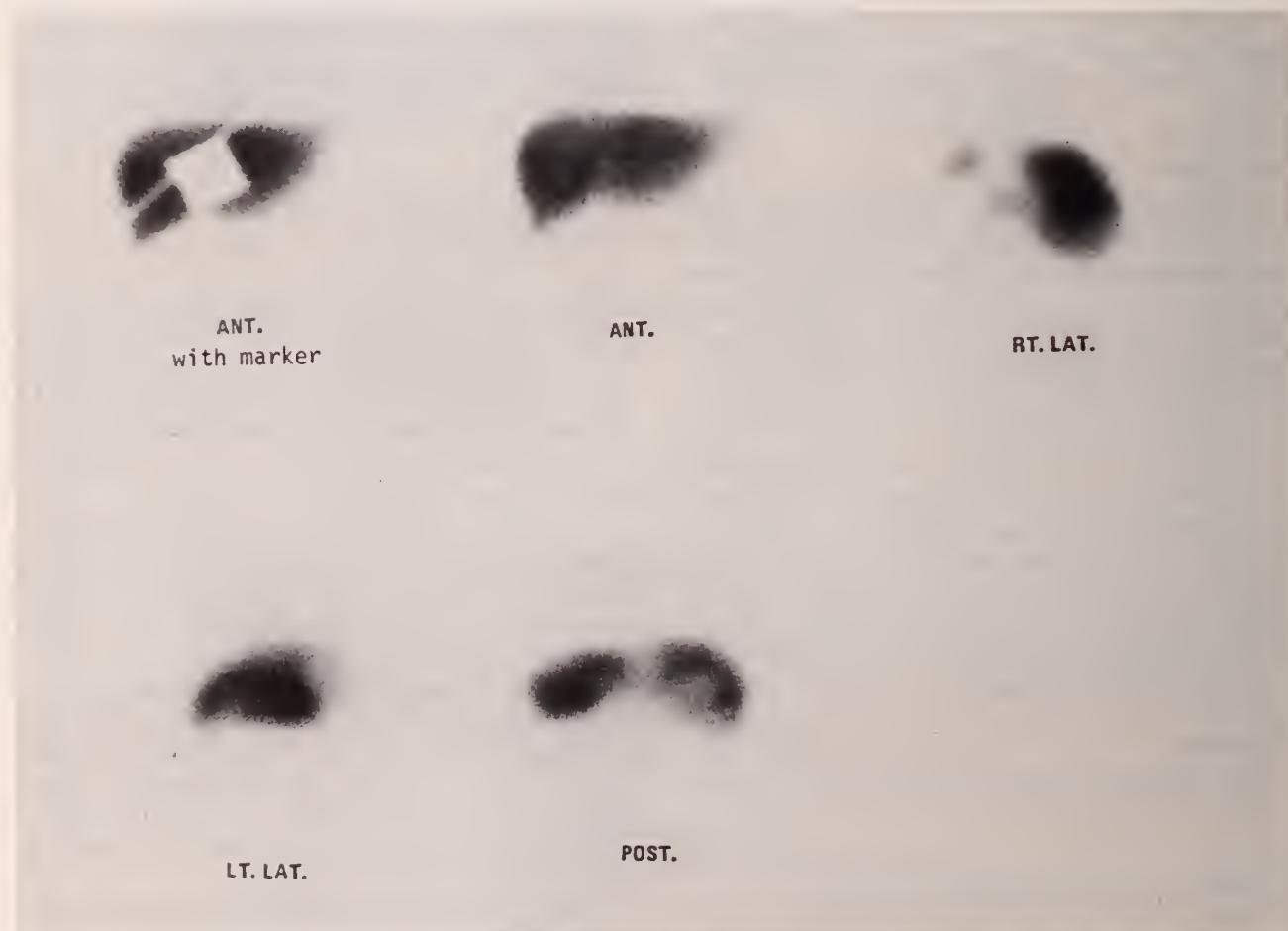


Figure 2. Radiocolloid liver scan showing a large cold defect posteriorly in the right lobe of the liver.

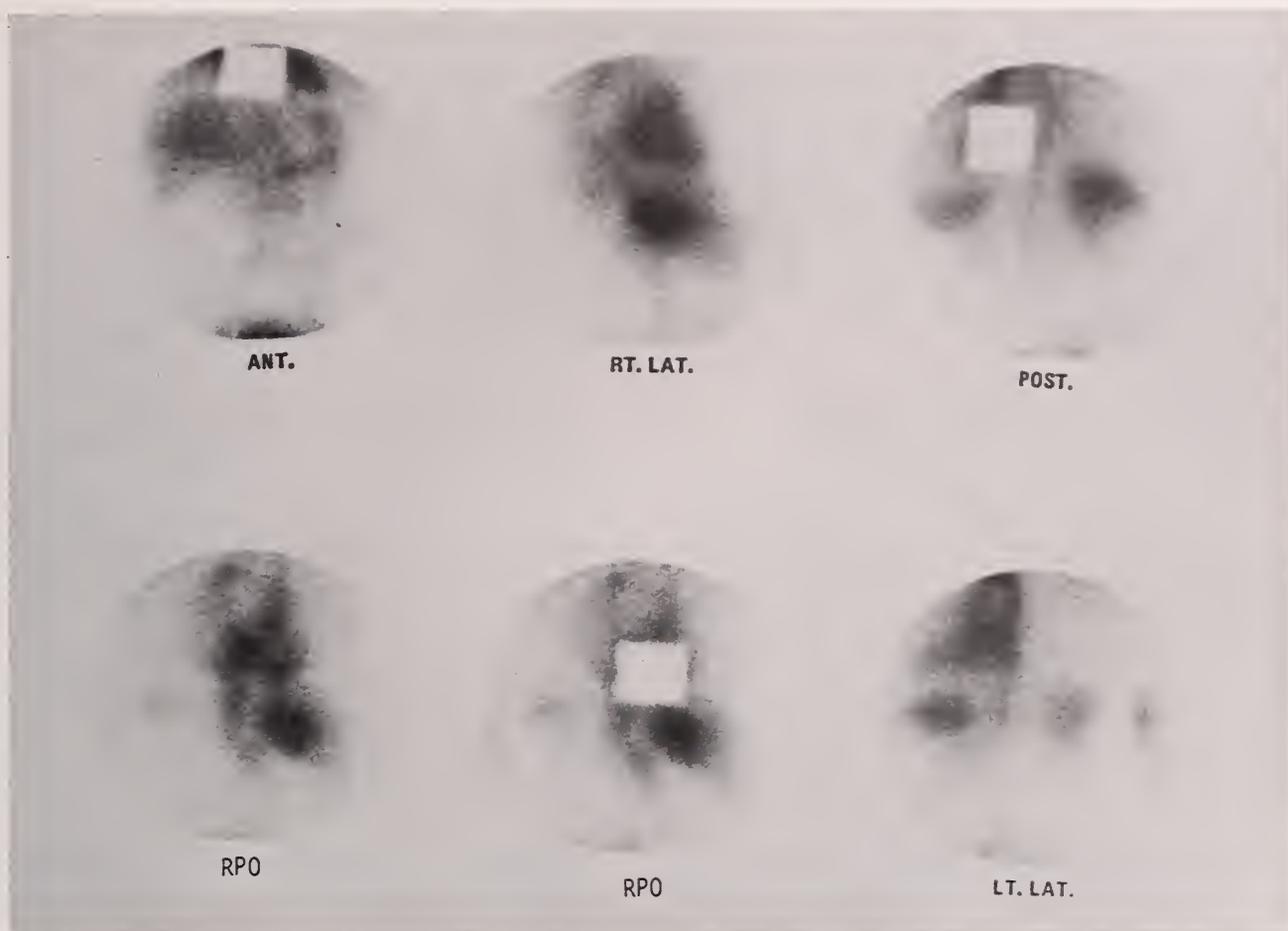


Figure 3. ^{99m}Tc RBC blood-pool study in multiple projections taken 90 min. after injection. The area of increased activity corresponds to the focal defect on radiocolloid liver scan. The lesion is best seen on the right lateral and right posterior oblique views. The increased activity in the lesion as compared to the surrounding liver activity confirms the diagnosis of hepatic cavernous hemangioma.

Both the flow pattern and delayed blood-pool images are necessary for the accurate diagnosis of hemangiomas. Increased blood-pool activity on 1-2 hours delayed imaging has been reported in both hemangiomas and some hepatomas. However, hemangiomas and hepatomas can be differentiated on the basis of the flow pattern. Hepatomas are hypervascular whereas hemangiomas are usually hypovascular. Less commonly, hemangiomas may demonstrate perfusion similar to that of normal liver or increased flow to part of the lesion. In all instances, however, there is a characteristic discordance between the flow and blood-pool images. This pattern of increased blood-pool activity with a discordant flow was not seen with any other type of hepatic lesion.¹

When dealing with thrombosed or fibrotic hemangiomas, which results in inadequate tracer concentration, the activity in these lesions will remain

the same throughout the study or will be absent. At times a lesion may show heterogenous uptake of the radionuclide indicating that only part of the hemangioma is thrombosed or fibrotic. However, hemangiomas may still be diagnosed if some areas of uptake within the lesion show the typical increasing ratio or persistence of uptake on delayed scans. There have been reports of isoactive blood-pool images with hepatomas and metastatic diseases as well as some hemangiomas; therefore, an isoactive delayed blood-pool image indicates a need for further evaluation.¹

Delayed hepatic blood-pool imaging with ^{99m}Tc labeled red blood cells shows high specificity (100%) and sensitivity (89%) in distinguishing hemangiomas from other lesions. The principal limitation of blood-flow and blood-pool scintigraphy is difficulty in detecting small hemangiomas located deep within the liver. The lower limit of detectability is

about 2 cm in diameter.³ Single Photon Emission Computed Tomography (SPECT) has the potential to demonstrate the characteristic delayed pooling in small, deeply seated hemangiomas because of the better separation of activity in a lesion from that of overlying tissue. Planar and SPECT blood-pool imaging are equally sensitive and specific for lesions greater than 3 cm but 50% of smaller hemangiomas may be missed by planar imaging alone, making SPECT the study of choice when small, deep lesions are suspected.⁵

The sonographic appearance of hemangioma is variable, nonspecific, and may be confused with hepatocellular carcinoma, liver cell adenoma, focal nodular hyperplasia and metastases. Thus, its primary use is as a screening test; it cannot be relied on as the definitive imaging method in diagnosing hepatic cavernous hemangioma. On CT metastases and hepatomas may exhibit features in common with hemangiomas, including focal areas of low attenuation in baseline scans, contrast-medium accumulation within the lesions and areas of nonenhancement. Arteriography is time-consuming, invasive, involves iodinated contrast material and is costly.³

More recently MRI has been reported to have a high sensitivity for cavernous hemangioma detection. But there are certain other benign and malignant lesions which may have similar appearances. Because of this overlap in signal intensity with other hepatic lesions, the specificity of MRI for diagnosing cavernous hemangioma is probably less than that of blood-pool imaging.⁶ The combination of 99mTc RBC dynamic scintigraphy (high specificity) and MRI imaging (high sensitivity) seems to be the combination of choice. MRI may also be useful in establishing the diagnosis of liver hemangioma if doubts remain after RBC scintigraphy.⁷

Clinical indications for performing hepatic blood-pool scintigraphy are as follows: (1) incidental find-

ing of a hepatic mass lesion during work-up for other diseases (2) presence of a hepatic mass believed to be incompatible with tumor because of normal liver function tests or inconsistent clinical findings (3) assessment of the vascularity of a hepatic mass lesion before biopsy.

Blood-flow and blood-pool scintigraphy should be performed as early as possible in the diagnostic workup since it is the imaging method with the most to offer with respect to relative specificity, low degree of invasiveness, higher technical reproducibility, and low cost.

In conclusion, hepatic blood-pool scintigraphy performed with 99mTc labeled red blood cells is an economical, noninvasive, easily performed and relatively specific method of diagnosing cavernous hemangioma of the liver. It is likely to be more definitive than sonography and more economical, simpler, and safer than CT or angiography.³

★★★

1500 E. Woodrow Wilson (39216)

References

1. Rabinowitz SA, McKusick KA, Strauss HW. "Tc-99m red blood cell scintigraphy in evaluating focal liver lesions." *American Journal of Roentgenology* 143:63-68, July 1984.
2. Ishak KG, Rabin L. "Benign tumors of the liver." *Medical Clinics of North America* 59:995-1013, 1975.
3. Moinuddin M, Allison JR, Montgomery JH, et al. "Scintigraphic diagnosis of hepatic hemangioma: its role in the management of hepatic mass lesions." *American Journal of Roentgenology* 145:223-228, August 1985.
4. Good LI, Alavi A, Trotman BW, et al. "Hepatic Hemangiomas: Pitfalls in Scintigraphic Detection." *Gastroenterology* 74:752-758, April 1978.
5. Malik MH. "Blood pool SPECT and planar imaging in hepatic hemangioma." Malik MH. *Clinical Nuclear Medicine* 12:534, July 1987.
6. Intenzo C, Kim S, Madsen M, et al. "Planar and SPECT Tc-99m red blood cell imaging in hepatic cavernous hemangiomas and other hepatic lesions." *Clinical Nuclear Medicine* 13:237-240, April 1988.
7. Sigal R, Lanir A, Atlan H, et al. "Nuclear magnetic resonance imaging of liver hemangiomas." *Journal of Nuclear Medicine* 26:1117-1122, October 1985.

**For a special kind of office help,
come to the Source.**

OffSource

Business Furnishings / Supplies / Machines
277 E. Pearl St. / Jackson, MS 39205
352-9000 / Toll-free 1-800-682-5399



The World's Most Popular K^{*}

Slow-K[®]
potassium chloride
slow-release tablets
8 mEq (600 mg)

It means "dependability" in almost any language

*Based on worldwide sales data on file, CIBA Pharmaceutical Company.
Capsule or tablet slow-release potassium chloride preparations should be reserved for patients who cannot tolerate, refuse to take, or have compliance problems with liquid or effervescent potassium preparations because of reports of intestinal and gastric ulceration and bleeding with slow-release KCl preparations.

Before prescribing, please consult Brief Prescribing Information on next page.

The World's Most Popular K

For good reasons

- **It works**—a 12-year record of efficacy¹
- **It's safe**—unsurpassed by any other KCl tablet or capsule^{2*}
- **It's acceptable vs liquids**—greater palatability, fewer GI complaints, lower incidence of nausea²
- **It's comparable to 10 mEq**—in low-dosage supplementation^{3†}
- **It's economical**—less expensive than all other leading KCl slow-release supplements on a per tablet cost to the patient¹



Slow-K[®]
potassium chloride
slow-release tablets 8mEq (600mg)

For patients who can't or won't tolerate liquid KCl.

*The most common adverse reactions to potassium salts are gastrointestinal side effects.

†Pooled mean serum potassium following oral administration of 30 mEq K-Tab compared to 24 mEq Slow-K in diuretic-treated hypertensives (n = 20) over 8 weeks.

C I B A

References: 1. Data on file, CIBA Pharmaceutical Company. 2. Skoutakis VA, Acchiardo SR, Wojciechowski NJ, et al. Liquid and solid potassium chloride. Bioavailability and safety. *Pharmacotherapy* 1980;4(6):392-397. 3. Skoutakis VA, Carter CA, Acchiardo SR. Therapeutic assessment of Slow-K and K-Tab potassium chloride formulations in hypertensive patients treated with thiazide diuretics. *Drug Intell Clin Pharm* 1987;21:436-440.

Slow-K[®]
potassium chloride USP
Slow-Release Tablets
8mEq (600 mg)

BRIEF SUMMARY (FOR FULL PRESCRIBING INFORMATION SEE PACKAGE INSERT)

INDICATIONS AND USAGE

BECAUSE OF REPORTS OF INTESTINAL AND GASTRIC ULCERATION AND BLEEDING WITH SLOW-RELEASE POTASSIUM CHLORIDE PREPARATIONS, THESE DRUGS SHOULD BE RESERVED FOR THOSE PATIENTS WHO CANNOT TOLERATE OR REFUSE TO TAKE LIQUID OR EFFERESCENT POTASSIUM PREPARATIONS OR FOR PATIENTS IN WHOM THERE IS A PROBLEM OF COMPLIANCE WITH THESE PREPARATIONS.

1. For therapeutic use in patients with hypokalemia with or without metabolic alkalosis; in digitalis intoxication and in patients with hypokalemic familial periodic paralysis.

2. For prevention of potassium depletion when the dietary intake of potassium is inadequate in the following conditions: patients receiving digitalis and diuretics for congestive heart failure; hepatic cirrhosis with ascites; states of aldosterone excess with normal renal function; potassium-losing nephropathy; and certain diarrheal states.

3. The use of potassium salts in patients receiving diuretics for uncomplicated essential hypertension is often unnecessary when such patients have a normal dietary pattern. Serum potassium should be checked periodically, however, and if hypokalemia occurs, dietary supplementation with potassium-containing foods may be adequate to control milder cases. In more severe cases supplementation with potassium salts may be indicated.

CONTRAINDICATIONS

Potassium supplements are contraindicated in patients with hyperkalemia, since a further increase in serum potassium concentration in such patients can produce cardiac arrest. Hyperkalemia may complicate any of the following conditions: chronic renal failure, systemic acidosis such as diabetic acidosis, acute dehydration, extensive tissue breakdown as in severe burns, adrenal insufficiency, or the administration of a potassium-sparing diuretic (e.g., spironolactone, triamterene) (see OVERDOSAGE).

All solid dosage forms of potassium supplements are contraindicated in any patient in whom there is cause for arrest or delay in tablet passage through the gastrointestinal tract. In these instances, potassium supplementation should be with a liquid preparation. Wax-matrix potassium chloride preparations have produced esophageal ulceration in certain cardiac patients with esophageal compression due to an enlarged left atrium.

WARNINGS

Hyperkalemia (See OVERDOSAGE).

In patients with impaired mechanisms for excreting potassium, the administration of potassium salts can produce hyperkalemia and cardiac arrest. This occurs most commonly in patients given potassium by the intravenous route but may also occur in patients given potassium orally. Potentially fatal hyperkalemia can develop rapidly and be asymptomatic.

The use of potassium salts in patients with chronic renal disease, or any other condition which impairs potassium excretion, requires particularly careful monitoring of the serum potassium concentration and appropriate dosage adjustment.

Interaction With Potassium-Sparing Diuretics

Hypokalemia should not be treated by the concomitant administration of potassium salts and a potassium-sparing diuretic (e.g., spironolactone or triamterene), since the simultaneous administration of these agents can produce severe hyperkalemia.

Gastrointestinal Lesions

Potassium chloride tablets have produced stenotic and/or ulcerative lesions of the small bowel and deaths. These lesions are caused by a high localized concentration of potassium ion in the region of a rapidly dissolving tablet, which injures the bowel wall and thereby produces obstruction, hemorrhage, or perforation. Slow-K is a wax-matrix tablet formulated to provide a controlled rate of release of potassium chloride and thus to minimize the possibility of a high local concentration of potassium ion near the bowel wall. While the reported frequency of small-bowel lesions is much less with wax-matrix tablets (less than one per 100,000 patient-years) than with enteric-coated potassium chloride tablets (40-50 per 100,000 patient-years) cases associated with wax-matrix tablets have been reported both in foreign countries and in the United States. In addition, perhaps because the wax-matrix preparations are not enteric-coated and release potassium in the stomach, there have been reports of upper gastrointestinal bleeding associated with these products. The total number of gastrointestinal lesions remains approximately one per 100,000 patient-years. Slow-K should be discontinued immediately and the possibility of bowel obstruction or perforation considered if severe vomiting, abdominal pain, distention, or gastrointestinal bleeding occurs.

Metabolic Acidosis

Hypokalemia in patients with metabolic acidosis should be treated with an alkalinizing potassium salt such as potassium bicarbonate, potassium citrate, or potassium acetate.

PRECAUTIONS

General:

The diagnosis of potassium depletion is ordinarily made by demonstrating hypokalemia in a patient with a clinical history suggesting some cause for potassium depletion. In interpreting the serum potassium level, the physician should bear in mind that acute alkalosis *per se* can produce hypokalemia in the absence of a deficit in total body potassium, while acute acidosis *per se* can increase the serum potassium concentration into the normal range even in the presence of a reduced total body potassium.

Information for Patients

Physicians should consider reminding the patient of the following:

To take each dose without crushing, chewing, or sucking the tablets.

To take this medicine only as directed. This is especially important if the patient is also taking both diuretics and digitalis preparations.

To check with the physician if there is trouble swallowing tablets or if the tablets seem to stick in the throat.

To check with the doctor at once if tarry stools or other evidence of gastrointestinal bleeding is noticed.

Laboratory Tests

Regular serum potassium determinations are recommended. In addition, during the treatment of potassium depletion, careful attention should be paid to acid-base balance, other serum electrolyte levels, the electrocardiogram, and the clinical status of the patient, particularly in the presence of cardiac disease, renal disease, or acidosis.

Drug Interactions

Potassium-sparing diuretics: see WARNINGS.

Carcinogenesis, Mutagenesis, Impairment of Fertility

Long-term carcinogenicity studies in animals have not been performed.

Pregnancy Category C

Animal reproduction studies have not been conducted with Slow-K. It is also not known whether Slow-K can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Slow-K should be given to a pregnant woman only if clearly needed.

Nursing Mothers

The normal potassium ion content of human milk is about 13 mEq/L. It is not known if Slow-K has an effect on this content. Caution should be exercised when Slow-K is administered to a nursing woman.

Pediatric Use

Safety and effectiveness in children have not been established.

ADVERSE REACTIONS

One of the most severe adverse effects is hyperkalemia (see CONTRAINDICATIONS, WARNINGS, and OVERDOSAGE). There also have been reports of upper and lower gastrointestinal conditions including obstruction, bleeding, ulceration, and perforation (see CONTRAINDICATIONS and WARNINGS); other factors known to be associated with such conditions were present in many of these patients.

The most common adverse reactions to oral potassium salts are nausea, vomiting, abdominal discomfort, and diarrhea. These symptoms are due to irritation of the gastrointestinal tract and are best managed by taking the dose with meals or reducing the dose.

Skin rash has been reported rarely.

OVERDOSAGE

The administration of oral potassium salts to persons with normal excretory mechanisms for potassium rarely causes serious hyperkalemia. However, if excretory mechanisms are impaired or if potassium is administered too rapidly intravenously, potentially fatal hyperkalemia can result (see CONTRAINDICATIONS and WARNINGS). It is important to recognize that hyperkalemia is usually asymptomatic and may be manifested only by an increased serum potassium concentration (5.5-8.0 mEq/L) and characteristic electrocardiographic changes (peaking of T waves, loss of P wave, depression of S-T segment, and prolongation of the Q-T interval). Late manifestations include muscle paralysis and cardiovascular collapse from cardiac arrest (9-12 mEq/L).

Treatment measures for hyperkalemia include the following: (1) elimination of foods and medications containing potassium and of potassium-sparing diuretics; (2) intravenous administration of 300-500 ml/hr of 10% dextrose solution containing 10-20 units of insulin per 1,000 ml; (3) correction of acidosis, if present, with intravenous sodium bicarbonate; (4) use of exchange resins, hemodialysis, or peritoneal dialysis.

In treating hyperkalemia in patients who have been stabilized on digitalis, too rapid a lowering of the serum potassium concentration can produce digitalis toxicity.

DOSEAGE AND ADMINISTRATION

The usual dietary intake of potassium by the average adult is 40-80 mEq per day. Potassium depletion sufficient to cause hypokalemia usually requires the loss of 200 or more mEq of potassium from the total body store. Dosage must be adjusted to the individual needs of each patient but is typically in the range of 20 mEq per day for the prevention of hypokalemia to 40-100 mEq or more per day for the treatment of potassium depletion. Large numbers of tablets should be given in divided doses.

Note: Slow-K slow-release tablets must be swallowed whole and never crushed, chewed, or sucked.

HOW SUPPLIED

Tablets—600 mg of potassium chloride (equivalent to 8 mEq) round, buff colored, sugar-coated (imprinted Slow-K).

Bottles of 100 NDC 0083-0165-30

Bottles of 1000 NDC 0083-0165-40

Consumer Pack—One Unit

12 Bottles—100 tablets each NDC 0083-0165-65

Accu-Pak[®] Unit Dose (Blister pack)

Box of 100 (strips of 10) NDC 0083-0165-32

Do not store above 86°F (30°C). Protect from moisture. Protect from light.

Dispense in tight, light-resistant container (USP).

Dist. by:
CIBA Pharmaceutical Company
Division of CIBA-GEIGY Corporation
Summit, New Jersey 07901

C87-31 (Rev. 8/87)

C I B A

128-3568-A

A Fairy Tale

DONALD E. COOK, M.D.

Meridian, Mississippi

ONCE UPON A TIME, not long ago, in a place not far away, people who had worked all their lives were able to stop working and do what they wanted when they reached a certain age — as long as they didn't want to do anything expensive. They were called senior citizens. They had paid into a trust fund for years so they could be secure in society. The trust fund was called Social Security, although it did not necessarily make all senior citizens secure in society.

Occasionally, senior citizens would get sick and have to consult people who had spent many years and much money learning how to help sick people. These people were called physicians. Since physicians also had to eat, wear clothes, get out of bad weather, and provide places where sick people could be treated, they requested compensation for their services. Most people thought this to be reasonable, although a very few thought it to be their fundamental right to receive treatment without compensation.

When people were very sick it was suggested they go to special buildings, called hospitals, where there were many trained people who had spent many years and much money learning how to make sick people well — or at least not so sick. These trained people had to use very special and very expensive machinery to find out why people were sick. They also had to use expensive medicines and expensive machinery to help people get better. Sometimes it worked.

As time passed, there were more and more people, especially senior citizens. It required more and more trained people, more and more expensive machinery, and more and more expensive medicines. This cost more and more money. So much, in fact, that many people couldn't afford to be sick.

Dr. Cook is engaged in the private practice of orthopaedic surgery in Meridian, MS.

"Groups of enterprising people would bet people they wouldn't get sick. They called themselves insurance companies, or 'third parties.' If people who bet with them did get sick, the companies would help pay the bills. The companies were very smart and made sure they would always win enough bets to make more money than they spent."

Groups of enterprising people would bet people they wouldn't get sick. They called themselves insurance companies, or "third parties." If people who bet with them did get sick, the companies would help pay the bills. The companies were very smart and made sure they would always win enough bets to make more money than they spent. It didn't take them long to realize that senior citizens were more likely to get sick, so they raised the ante to the point where senior citizens couldn't afford to bet.

Since there were many senior citizens who couldn't afford to get sick, and couldn't afford to make bets with insurance companies, hopeful leaders often promised to help if they were elected. Many did get elected. They were called politicians, or other appropriate names.

Politicians decided to help pay the bills with money from the Social Security Trust Fund. This sounded like a good idea at the time, although the fund was never designed or intended for that purpose. No one knew how much it would cost.

Many physicians began to get paid for services they had been rendering free in the past. A few became greedy. Most did not, and charged reasonable fees for their services. Their expenses steadily increased, even more than ordinary living expenses. Therefore, they had to charge more. Some charged more than was necessary; however, most did not.

Groups of physicians designed "relative value" systems in order to keep fees reasonable and somewhat uniform. They were told that this was illegal, since it represented "price fixing." Politicians later saw the rationale of the system, and said it was legal if they did it for physicians.

All hospitals had to pay more for everything. People who worked there were highly trained and warranted more money. Machinery was unreasonably expensive, and newer types of machines were being invented every day. If the physician or hospital didn't use a particular machine, and someone who was sick didn't get well because the machine was not used, the physician and the hospital had to give the sick person a very large amount of money. This cost had to be passed on to other people. This became very, very expensive.

"Since there were many senior citizens who couldn't afford to get sick, and couldn't afford to make bets with insurance companies, hopeful leaders often promised to help if they were elected. Many did get elected. They were called politicians, or other appropriate names."

It cost more than anyone imagined. Soon it was realized that the trust fund could not pay all the bills. Since the primary objective of politicians was to be reelected, they would not accept responsibility. They blamed hospitals and physicians, who they said charged too much, made too much money, and controlled what everything cost.

Some hospitals may have made too much money. Most did not. It was some times very difficult to determine, since many hospitals used very creative accounting methods. Even when many hospitals went broke, it was still claimed they made too much money.

Some physicians may have made too much money for what they did. Most did not. None directly controlled what anything cost, except their own fees, and most fees appeared to be reasonable. They did control the quality of care their patients received. They could cut corners; however, if they cut too many corners their sick patients wouldn't get well. Some might even die. If the patient died or did not get as well as they thought they should because corners were cut, physicians had to pay very large sums of money.

Since blaming hospitals and doctors didn't work well enough, politicians tried other measures. Some

appeared to be directly contrary to the founding principles of the country, including economic geographic discrimination, specialty discrimination, price fixing, deterring free trade, deprivation of due process, retroactive laws, bills of attainder, and activities that would probably be subjected to antitrust litigation in the "private sector." However, these were tolerated, since they were largely hidden by revisions of the laws occurring so fast and so frequent no one was sure what the law really was. Also, if a physician attempted to fight a specific law in court, it would cost him so much money and so much time he could not afford to fight. Even if he did, and won, it probably would not have changed the system significantly. It became evident how one of the hallmarks of democracy, the Mount Rushmore Monument, came to be located on sacred indian land obtained by less than democratic methods.

At first, politicians sent people called auditors to each hospital to determine what it cost to treat sick people. They said, according to their figures, it cost less to treat a patient 65 years old than one 64 years of age, although they had identical problems and received identical services. No one understood what they were talking about. If their figures were not low enough they would be replaced by other auditors whose figures were low enough. This increased the cost to other sick people who were not senior citizens, since they had to subsidize senior citizens. This really caused people to believe that physicians and hospitals charged too much, made too much money, and probably controlled not only the cost of everything else, but also controlled the local Cosa Nostra.

Meanwhile, the same politicians said it was legal to pay exorbitant amounts for ash trays, flashlights, coffee pots, toilet seats, hammers, bolts, and numerous other items, reportedly because "acceptable accounting procedures" were used. Physicians were not allowed accounting procedures of any nature. Hospital accounting procedures were done for them by the payee — a rather unique arrangement.

It was predicted there were going to be too many physicians. Politicians thought this to be good, since they thought this would create competition and lower prices. The same politicians were paying farmers not to plant certain crops, and were buying cheese and butter they didn't need, simply to keep prices high because there was too much competition. They were also subsidizing farmers to grow tobacco, which was purported to be responsible for many of the health problems.

Politicians stated that the degree of idealism was usually directly proportional to the distance from

the problem. So did physicians and hospitals.

As things got worse, with sick people having to subsidize senior citizens more and more, and insurance companies increasing the ante to unaffordable levels, many insurance companies began to practice medicine without a license by manipulating purse strings, requiring prior permission for treatment, and dictating the type and limits of treatment, thinking the practice of medicine to be an exact science, and that every illness followed a precise unvariable course with a precise unvariable response to treatment. Many companies selected physicians who would give them a discount, or allow the company to set the fee, referring to their physicians as "preferred," although it was obvious whom they were preferred by. Everyone reacted rather than acted.

Although politicians promised they would never do it, and physicians and hospitals swore they would never tolerate it — it happened. It didn't happen all at once. There was never a vote that it should happen. It evolved and emerged so gradually that no one really noticed it until it was there.

They didn't call it socialized medicine — but it was. They used another name for it, but everyone knew what it was. There were no loud or lingering objections — only occasional grumbings. During the process of evolving those who objected either dropped out, died off, or were intimidated into acceptance by economic coercion. Only a few recalled the old system. Most never thought about it.

Politicians took money from all the people, except the poor. If a person had more money, more was taken from him. This was called his "fair share." Money was also taken from the trust fund. Some of the money was used to run the system. No one talked about how much it cost. Only a few knew it cost more than the old system.

The health care system was stratified. The "primary care" layer consisted largely of office based family physicians and semi-retired specialists. The second layer was made up of regional hospitals, while the third layer consisted of large complex medical centers, usually referred to as ivory towers. The larger ivory towers were responsible for preventive medicine, handled largely through the educational system and news media.

All people who worked for the system, including physicians, were paid salaries. Salary was based on job description, qualifications, training, and seniority, plus factors no one understood. Hospitals and ivory towers were run by faceless administrators, called bureaucrats. Their primary function appeared to be to write memoranda in language usually used

"Groups of physicians designed 'relative value' systems in order to keep fees reasonable and somewhat uniform. They were told that this was illegal, since it represented 'price fixing.' Politicians later saw the rationale of the system, and said it was legal if they did it for physicians."

in insurance policies and legal contracts, designed primarily to protect their rears rather than give concise instruction.

Medicines, supplies, selected services, and machinery were purchased by low bid procedure, or from special "health care contractors." Everyone knew about the special contractors, but pretended they believed they were the only ones who could furnish the specific services or products. Prices were always covered by red tape. Purchasing agents seemed to universally prosper, which supposedly indicated their unique ability to handle money, which in turn qualified them to be purchasing agents.

If a person became sick they would present themselves to the primary care facility in their district. They were assigned a physician, who made diagnoses and rendered treatment using a computerized procedure manual. If the patient didn't respond to treatment, or if the computer so advised, they were admitted to the regional hospital where they were treated by other physicians, who used a different computerized procedure manual. If this didn't work they were transferred to the appropriate ivory tower, where even the subspecialist had subspecialties. They used even more complex procedure manuals, usually written in language used by administrators. If elective surgery was needed, it could usually be performed within a year or so.

"At first, politicians sent people called auditors to each hospital to determine what it cost to treat sick people. They said . . . it cost less to treat a patient 65 years old than one 64 years of age, although they had identical problems and received identical services. No one understood what they were talking about."

Psychologists, sociologists, and "attitude correction specialists" were present at all levels, usually behind the scenes, since it was recognized that a multiplicity of illnesses were simply symptoms of

"What about freedom? It's still there. It's just a matter of degree. . . . Why doesn't everyone live happily ever afterward, as in all fairy tales? Maybe it isn't a fairy tale after all."

a person's inability to cope. Many patients were referred to Rest and Recuperation Resorts, where they received hot baths, poultices, manipulations, herbs, and disguised group therapy. These measures had not been shown by scientific methods to be effective, but they appeared to be economically effective, and were therefore perpetuated. In spite of this, art was still needed. It was rarely found.

Physicians and hospitals were told what to do, when to do it, how to do it, and how much they

would be paid to do it. If mistakes were made the unfortunate patient still received money, but not quite as much as before. Most of the politicians were lawyers.

People accepted this. They were told that it was good. Also, there was no choice.

What about freedom? It's still there. It's just a matter of degree. A citizen can choose to remain sick, or to join the system. A person can choose to be a physician, or to follow some other line of work. If he chooses to be a physician, he can also choose his field of specialty — if it isn't projected to be overcrowded. He can even occasionally choose the section of the country where he would like to live.

Why doesn't everyone live happily ever afterward, as in all fairy tales? Maybe it isn't a fairy tale after all.

★★★

P.O. Box 3580 (39301)

PHYSICIANS, THERE ARE TWO KINDS OF FLEXIBILITY IN THE ARMY RESERVE WE THINK YOU'LL LIKE.

One, time. We know how tough it is for a busy physician to make weekend time commitments. So we offer flexible training programs that allow a physician to share some time with his or her country. We arrange a schedule to suit your requirements.

Two, the opportunity to explore other phases of medicine, to add a different kind of knowledge—the challenge of military health care. It's a flexibility which could prove to be both stimulating and rewarding, with the opportunity to participate in a variety of programs that can put you in contact with medical leaders from all over the country.

See how flexible we can be, call our Army Medical Personnel Counselor:

**MAJ MEL VAN DYKE
(504) 522-1977/1978**

**BE ALL YOU CAN BE.
ARMY RESERVE.**

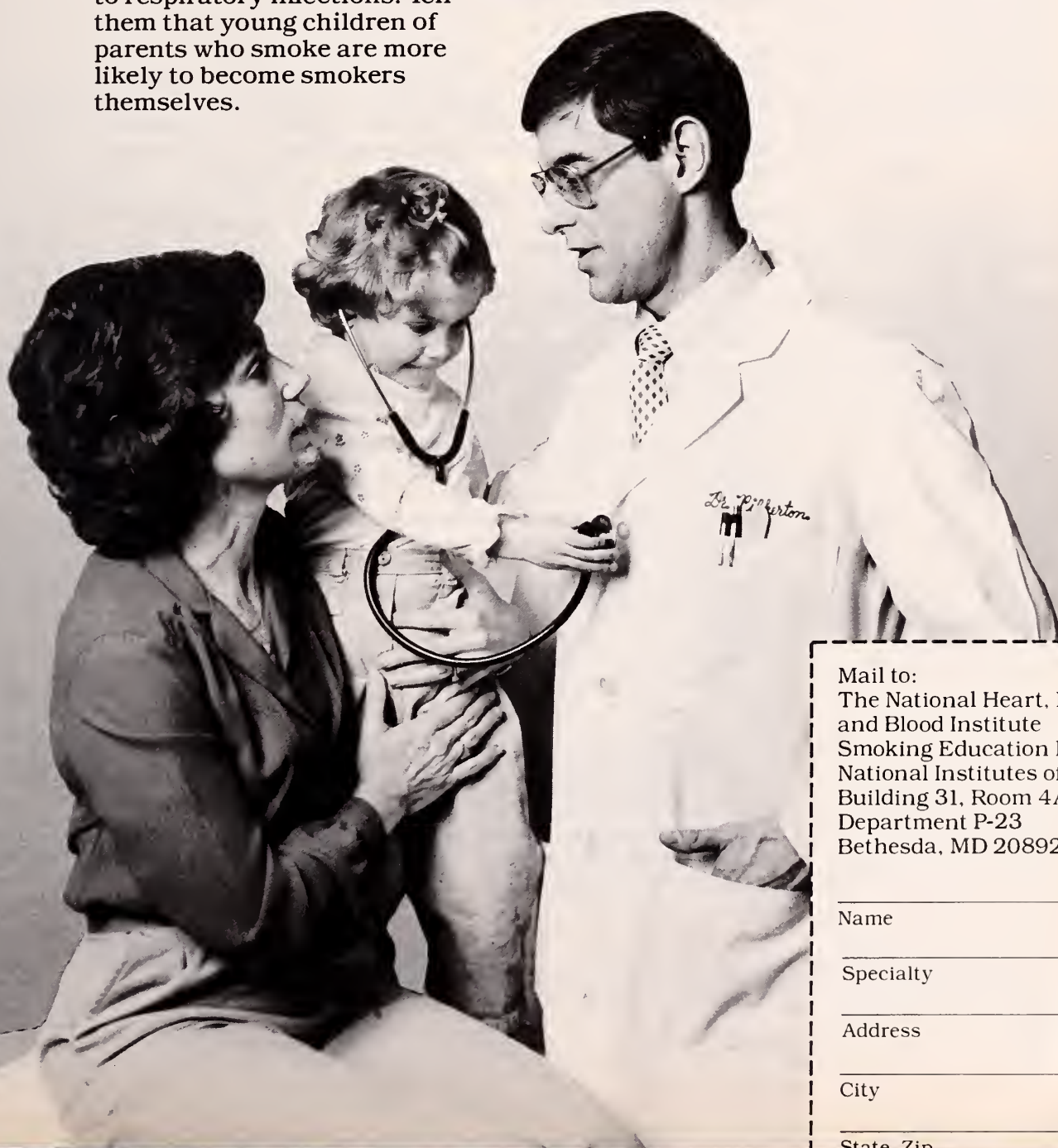
A Clinical Opportunity for Smoking Intervention

You can play a special role in reaching smokers. Encouraging parents not to smoke can improve the health of the entire family.

Take a few minutes to explain that children of parents who smoke are often more prone to respiratory infections. Tell them that young children of parents who smoke are more likely to become smokers themselves.

The minutes you spend can make a difference now, and in the years ahead.

For a free copy of *Clinical Opportunities for Smoking Intervention: A Guide for the Busy Physician*, complete the form below.



Mail to:
The National Heart, Lung,
and Blood Institute
Smoking Education Program
National Institutes of Health
Building 31, Room 4A 18
Department P-23
Bethesda, MD 20892



Name

Specialty

Address

City

State Zip



THE PRESIDENT'S PAGE

DAVID R. STECKLER, M.D.

Expressions of Concern and Direction

The recent meeting of our MSMA House of Delegates demonstrated that our profession, although beset by many concerns, is ready to assume a leadership role in directing the future of our country's health care system. The approximately 165 delegates in attendance handled an extensive agenda in a constructive and positive manner.

Perhaps as an indication of the democratic and representative composition of our MSMA House of Delegates, medical tort reform was overwhelmingly identified as our number one legislative priority. This expression reflects a similar concern of most of our colleagues throughout the country, as identified in poll after poll. And the intensity of this concern is on the rise as the present tort system increasingly adversely affects the physician/patient relationship and access to health care services.

Almost equalling our delegates' concerns regarding the present medical tort system — and particularly its detrimental effect on access to health care services — was their concern about the increasing number of medically needy citizens in our state and country. There are now some 450,000 people in our state who could be classified as medically needy in that they are not eligible for Medicaid and have no health insurance coverage through employment or otherwise. Our delegates directed a two-prong attack on this problem. Namely, that the association support expansion of the MS Medicaid Program to the maximum eligibility level permitted under current federal law and also support an AMA proposal for Congress to establish uniform eligibility and benefits for Medicaid across all states. The latter recognizes that some 60 percent of our citizens with incomes below the federal poverty level are not covered by Medicaid, and whereas New York spends \$3,200 per Medicaid recipient annually, Mississippi in contrast spends \$400.

Health care for our senior citizens was also a concern of our delegates. They supported a "Senior Care Program" to assure that needy Medicare beneficiaries are receiving medical services. The program, which will begin in the North Delta and Golden Triangle areas of our state, will identify needy Medicare beneficiaries. Some 70 percent of Medicare claims in Mississippi are presently assigned, thus indicating that an unofficial "Senior Care Program" is now operating. The "Senior Care Program" will be expanded statewide after an initial trial period.

These are just a few of what I would call expressions of concern and direction by your elected delegates. A complete review of MSMA's 1988 Annual Session appears in next month's *Journal MSMA*.

A handwritten signature in dark ink, appearing to read "David R. Steckler". The signature is fluid and stylized, with a long horizontal flourish extending to the right.

**Consultation Service Could
Resolve Differences, Benefit Patients**

The past year has seen a sharp increase in the severity of the conflict between physicians and third party payors over pre-admission and length of stay certification. Utilization of these concepts for cost containment is not objectionable, but the unilateral decisions made daily by non-physicians with no first-hand knowledge of the specific patient are very objectionable, and in many instances totally unreasonable. One has to wonder about the validity of any program when the person refuses your request for services and then in the next breath asks you to spell the diagnosis or explain the illness to them. Physicians are being asked to educate the personnel of third party payors and this is not our task.

While the concept is valid, the extreme antagonism created makes it difficult on all parties involved, and in many instances is bad for the patient. Third party payors and physicians should be concerned about the cost of medicine but there should be better control of this particular method.

It would be extremely helpful if the AMA would promote formation of a clearinghouse or consultation service, with all specialties involved, that all parties could use in resolving these problem cases. The companies could get appropriate information upon which to base their decisions and physicians would know that their actions could be evaluated also. Such a service would greatly assist in assuring that what is done is in the best interest of the patient, not some third party company or physician.

MYRON W. LOCKEY, M.D.
Editor

The editors invite your comments, inquiries, and suggestions. Please address letters to the Editors, *Journal of the Mississippi State Medical Association*, P.O. Box 5229, Jackson, MS 39216.

Next Month in Journal MSMA

- Complete Report, 120th Annual Session
- Address of the President, Dr. Lamar Weems

New this year . . .

One more reason to join the AMA

Special benefit packages available with 1988 membership



A diverse membership has diverse needs, and the AMA is committed to addressing those needs. This year we're introducing something new when you join the AMA or renew your membership. In your AMA Membership Kit you'll have the opportunity to sign up for one of three *benefit packages* of publications, conferences, participatory panels, focused issue updates, etc., on topics related to the area you designate. Each package is tailored to address your particular interests:

- *Medical and scientific information and education* designed to enhance your practice, profession, and the public health.
- *Representation concentrated specifically on economic concerns*, such as professional liability and third party reimbursement.
- *Representation on a broad range of issues*, including not only economic concerns, but also quality of care, ethical issues, public health, and scientific issues.

If your Preferred Professional Mailing Address should change, please make the change to the right of the address shown. Be sure to retain your membership card. Use this portion of the card for changes only.

	New Address
	City
	State / Zip
	Telephone

IMPORTANT: In order to receive your full range of membership benefits, you MUST return this card.

In addition to my usual benefits, I prefer a specially designed package of publications, topical conferences, participatory panels, focused issue updates which focus on the following.

(Check only one)

☐ **Medical and Scientific Information and Education** which will enhance my practice, profession, and the health of the public.

☐ **Representation Concentrated Specifically on Economic Concerns** facing my practice and profession, such as professional liability and third-party reimbursement.

☐ **Representation on a Broad Range of Issues** facing my practice and profession, including not only professional liability and third-party reimbursement but also quality of care, ethical issues, public health, scientific issues, etc.

Look for this card in your AMA Membership Kit

To receive your full range of benefits, select one and only one of these free packages by filling out the business reply card in your AMA Membership Kit.

Please look for the card in your AMA Membership Kit and return it promptly. Your new benefit package is one more way the AMA supports you as a physician.

James H. Sammons, MD
Executive Vice President



American Medical Association
535 North Dearborn Street
Chicago, Illinois 60610

NEWS

Jean Hill Named President-Elect of AMA Auxiliary



Jean Hill of Hollandale was elected president-elect of the American Medical Association Auxiliary on June 27, at the organization's 1988 Annual Session of the House of Delegates, held June 26-29, at The Drake in Chicago.

Mrs. Hill, who is married to family practitioner J. Edward Hill, M.D., will serve as president-elect for one year and will then assume the office of AMA Auxiliary president in June 1989. She is the first woman from Mississippi to be elected president-elect of the AMA Auxiliary.

Locally, Mrs. Hill has been active in the Delta-Washington County auxiliary as well as in the Mississippi State Medical Association Auxiliary, serving as president of both organizations.

Among her other volunteer and civic activities, Mrs. Hill has served as the beautification chairman of the Hollandale Chamber of Commerce, a past president of Deer Creek Mothers' Club of Deer Creek Academy, president of the Washington County Republican Women, and as a member of the board of directors of the Hollandale United Methodist Church. She was also the first woman to serve as chairman of the board of the Mississippi affiliate of the American Heart Association and was honored as one of Mississippi's outstanding Republican women in 1986.

The AMA Auxiliary is a nationwide, volunteer organization of 75,000 physicians' spouses who

work in state and county chapters to improve community health and provide support to the medical profession.

MLA Elects New Officers

The 75th annual meeting of the Mississippi Lung Association was held recently in Jackson. Newly elected officers of the MLA Board of Directors include G. Boyd Shaw, M.D. of Jackson, president, and Charles J. Parkman, M.D. of Hattiesburg, first vice-president. On the national level Dr. Shaw is currently Mississippi Lung Association's representative to the American Lung Association Board of Directors and Dr. Parkman is the Mississippi Thoracic Society's Representative Councilor to the American Thoracic Society.

Antone W. Tannehill, Jr., M.D., of Tupelo was elected to serve as a member of the MLA Board.

Other physicians continuing to actively serve on the MLA Board of Directors include: Guy D. Camp-

(Continued on next page)

Dr. Campbell Honored For Volunteer Service



Dr. Guy D. Campbell, right, accepts a special twenty-five year service award presented at the Mississippi Lung Association's 75th Annual Meeting. At left is MLA executive director Judson M. Allred, Jr. Dr. Campbell was cited for an outstanding record of service including 12 years as Mississippi's Representative Director on the American Lung Association's Board of Directors; past president of the MLA Board of Directors, the Mississippi Thoracic Society and Southern Thoracic Society; and twenty-five years as a member of the MLA Board of Directors and Executive Committee. The Jackson physician also was recipient of the 1981 MLA Distinguished Service Award.

bell, M.D., Alton B. Cobb, M.D., M.P.H., Roland B. Robertson, Jr., M.D., Clyde A. Watkins, M.D., all of Jackson. John F. Busey, M.D., also of Jackson, is an honorary board member.

Funeral Services Held for Dr. Newton

Dr. Michael Newton, the first chairman of the Department of Obstetrics and Gynecology at the University of Mississippi Medical Center, died May 24, in Chicago. He was professor of ob-gyn at Northwestern University School of Medicine.

In addition to his teaching duties, Dr. Newton was medical director of ambulatory care for the Prentice Women's Hospital.

Dr. Newton had served as president of the Association of Chicago Gynecologic Oncologists and

served on the editorial board of the *Journal of Reproductive Medicine*. His latest contribution to the profession was a book (co-authored by his son Dr. Edward Newton) published this year by W.B. Saunders, *Complications of Gynecologic and Obstetric Management*. He and his son, Dr. Warren P. Newton, were collaborating on a new book, *Geriatric Gynecology*, at the time of his death.

Dr. Newton was chairman here from 1955-1966 when he went to Pitzker School of Medicine in Chicago. He joined the Northwestern faculty in 1977.

He is survived by his two sons, two daughters, and his wife, Niles.

The family requests that memorials be made to the Reference Library, LaLeche League International, 9616 Minneapolis Avenue, Franklin Park, Illinois 60131.

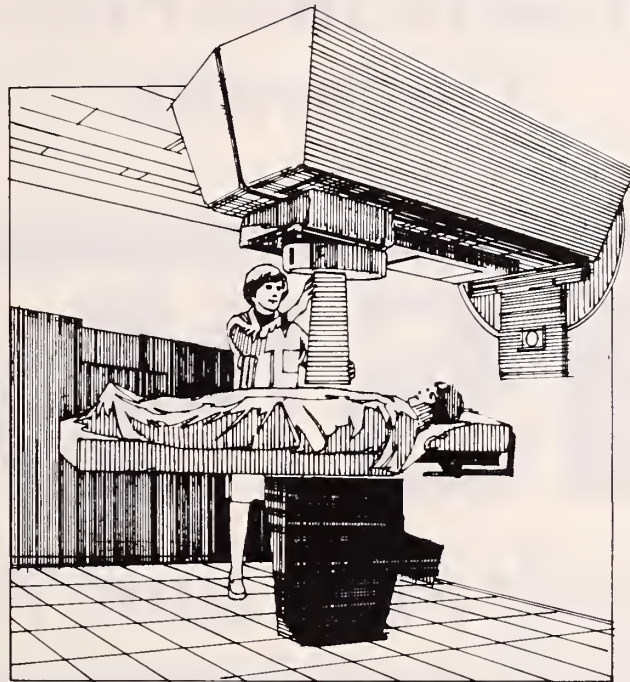
Schwartz Receives MSMA's Tolbert Award



Alan Christopher Schwartz, left, was among students recognized for academic achievement and leadership in the School of Medicine at the University of Mississippi Medical Center. Schwartz received the Virginia Stancil Tolbert award, sponsored by the Mississippi State Medical Association, for superior scholarship and leadership in campus activities. Schwartz is president of the senior class. Others recognized included, from left, Larry Darnell Cooper, Pamela Kay Robinson and John Scott Story. Dr. Norman C. Nelson, right, is UMC vice chancellor.

Now available to Mississippi State Medical Association members, protection from one of America's leading diseases **CANCER.**

"CANCERPAY PLUS"



- "CancerPay Plus" is a quality cancer policy supplement to your present health insurance.
- Offered by the Mississippi State Medical Association, "CancerPay Plus" provides excellent benefits to physician members of MSMA, their employees and families.
- Reduced rates through Association affiliation
- Payroll deducted with groups as small as one participant.
- Pays in addition to all other insurance, including Medicare.
- Intensive Care and Dread Disease riders available.

For Complete Details of Plan Call or Write:

Scott Shappley

MISSISSIPPI STATE MEDICAL ASSOCIATION

P.O. Box 55509

Jackson, MS 39216

(601) 354-5433 — Watts 1-800-682-6415

**You're
a Professional.**

**You need Professional
Health Insurance
Coverage.**

MSMA

Benefit Plan and Trust

MSMA Benefit Plan and Trust is a superior insurance program which fulfills the quality of coverage and affordability that everyone wants.

Sponsored by the Mississippi State Medical Association, the MSMA Benefit Plan and Trust offers life and health benefits to physician members of MSMA, their employees and families.

- \$1,000,000 lifetime benefits.
- Life Coverage up to \$50,000.
- Broad benefits with fair and equitable rates.
- Management by and for physicians.
- Non-profit and administered at lowest possible cost.

For Complete Description of Benefits Write:

MSMA Benefit Plan and Trust

P.O. Box 55509
Jackson, MS 39216

PERSONALS

GEORGE E. ABRAHAM of Vicksburg has been recertified for membership in the American Academy of Family Physicians.

JOHN M. ALBEA has associated with Gulf Oaks Hospital and Clinic in Biloxi for the practice of adult and adolescent psychiatry.

OSSAMA AL-MEFTY of UMC made a presentation at the 13th annual joint conference on Stroke and Cerebral Circulation in San Diego, California.

GENE R. BARRETT of Jackson was on the faculty of "Philosophy of the Knee" at Callaway Gardens, Georgia, and presented a paper on synthetic ligaments at the Mid-America Orthopaedic Society in Tucson, Arizona.

THOMAS M. BLAKE of UMC received the Mississippi Chapter, American College of Physicians' Laureate Award, presented to honor ACP fellows or masters who have demonstrated a commitment to excellence in medical care, education or research, and community service.

L. H. BRANDON of Starkville has been recertified for membership in the American Academy of Family Physicians.

SWAN BURRUS of Tupelo has been elected chairman of the Mississippi Section, American College of Obstetrics and Gynecology.

ALAN J. CLARK of Pascagoula was a participant in a community public seminar on "The Aging Eye."

JOHN CLAY of Meridian spoke on cancer prevention at a meeting of the Meridian Kiwanis Club.

RICHARD A. CONN of Hattiesburg presented a paper on total knee replacement at the Mississippi-Alabama Orthopaedic meeting at Point Clear, Alabama. Co-author was DAVID W. BOMBOY of Hattiesburg.

C. RALPH DANIEL, III of Jackson presented a seminar on nail disorders in Birmingham, Alabama.

RICHARD J. FIELD, JR. of Centreville was keynote speaker at the annual Surgeons' Day at Mercer University School of Medicine in Macon, Georgia. He spoke on "Rural Surgery in America." He also represented the American College of Surgeons at the American Pediatric Surgical Association meeting in Tucson, Arizona.

JACK HUDSON of Hattiesburg lectured on "Screen-

ing for Colon Cancer in a Family Practice" at the Family Practice Update Workshop in Jackson.

EDWARD IVANCIC of Tupelo spoke on Fetal Alcohol Syndrome at a meeting of the National Council on Alcoholism of Northeast Mississippi.

MICHAEL JABALEY of Jackson was part of a six-physician group that traveled to Moscow and Leningrad for the first bilateral symposium between the U.S. and the Soviet Union on plastic and reconstructive microsurgery. He lectured on "Peripheral Nerve Repair, Indications, Techniques, Results, Difficulties."

Jackson Pediatric Clinic announces the retirement of CECIL G. JENKINS and the continuation of J. LEE OWEN and WILLIAM D. PAYNE in the practice of pediatrics and adolescent medicine.

EDWARD M. LOWICKI of Jackson was elected fellow of the American Society for Laser Medicine and Surgery at the association's annual meeting in Dallas. He is the first surgeon in Mississippi to become a fellow in this national association.

DOCTOR'S EXECUTIVE SET SPECIAL

500 Business Cards
500 Appointment Cards
500 Envelopes / 500 Letterheads

All printed on quality white paper with black ink (Includes minimum typesetting) **\$79⁹⁹**

1000
ENVELOPES

#10 or
6 3/4 Regular White
24 lb. Envelopes

\$34⁹⁵

1000
6 3/4 BLUE
RETURN
ENVELOPES

\$29⁹⁵

Printed in Black Ink

Offer includes minimum typesetting / Window envelopes — Add 10%
All orders shipped U.P.S. or on our delivery trucks at no additional charge.

Steve Kowalski's

Northtowne Printers

3909 Northview Drive • Jackson, MS 39206

(601) 981-2675

PERSONALS/Continued

FRANK J. MORGAN, JR. of Jackson was reelected to a three-year term on the FLEX Board at the annual meeting in San Diego, California.

DARDEN H. NORTH of Jackson was elected chairman of the Junior Fellow College Advisory Council (JFCAC) of the American College of Obstetricians and Gynecologists at the college's annual clinical meeting in Boston.

WAYNE PITRE of Vicksburg recently conducted a community education seminar on skin cancer.

ETHEL ROSE of Meridian made a presentation on Alzheimer's disease at the state convention of the Mississippi Licensed Practical Nurses' Association.

STEVE SENTER of Belmont and CHERYL J. SZABO of Tupelo have been recertified for membership in the American Academy of Family Physicians.

JOHN A. TANKSLEY of Greenville announces the association of GEORGE BELCHIC, JR. for the practice of orthopedic surgery. Dr. Tanksley recently was part of a nine-physician team which toured hospitals and made presentations in China.

NANCY TATUM of Petal made a presentation on AIDS at a benefit for a Jackson AIDS hospice.

EUGENE E. TAYLOR of Natchez was installed as president of the Mississippi Orthopedic Society at the annual meeting held at Point Clear, Alabama. GENE BARRETT was elected president-elect.

THAD WAITES of Hattiesburg spoke on prevention and treatment of heart disease at a meeting of the Laurel Kiwanis Club.

E. FRAZIER WARD of UMC was guest speaker for an AO/ASIF Continuing Education course in Memphis. He also was guest speaker for the Orthopaedic Trauma Symposium sponsored by the University of Tennessee, Memphis College of Medicine.

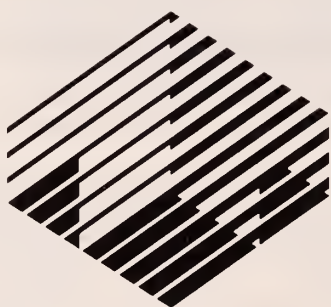
W. LAMAR WEEMS of Jackson recently received the 1988 Advocacy Award of the Mississippi Council on Aging in recognition of his dedication and support to Mississippi's senior citizens.

JAMES K. WILLIAMS of Pascagoula participated in a community education seminar on "The Aging Eye."

LOUIS WISE of Jackson presented a seminar on skin cancer as part of St. Dominic Hospital's HealthLine community education series.

WILLIAM M. WOOD of Meridian has been named chief psychiatrist of the Weems Community Mental Health Center in Forest.

CORRECTION: The June "Personals" listing for Dr. Ancel Tipton should have read, "ANCEL TIPTON of Jackson announces the relocation of his office for the practice of medical neurology and clinical physiology to Suite 202, 971 Lakeland Drive."



**We earn
your trust every day.™**



Trustmark™
National Bank

Jackson/Bogue Chitto/Brookhaven/Canton/Columbia
Georgetown/Gretna/Greenville/Gretna/Hattiesburg/Hazlehurst
Leland/Liberty/Madison/Magee/McComb/Petal/Ridgeland
Tylertown/Wesson

Member FDIC



Introducing a new company with an array of services for physicians.

Perhaps you are thinking of adding to your practice and would like:

- A physician to help with the patient load,
- An affiliate in your facility to share costs, or
- A partner until you are ready to retire.

Perhaps you are considering selling your practice and need:

- An assessment of your practice for the purpose of marketing,
- An appraisal of the furnishings, accounts receivables, and good will,
- An individual to act as your agent.

Perhaps you are wondering about the current condition of your practice and need:

- Consultation on accounts receivables,
- Consultation on billing and collections, or
- Help with staff training.

Perhaps you are planning to start a practice and need help:

- Setting it up,
- Acquiring furniture, equipment and supplies,
- Selecting and training your staff.



Frank Cochran

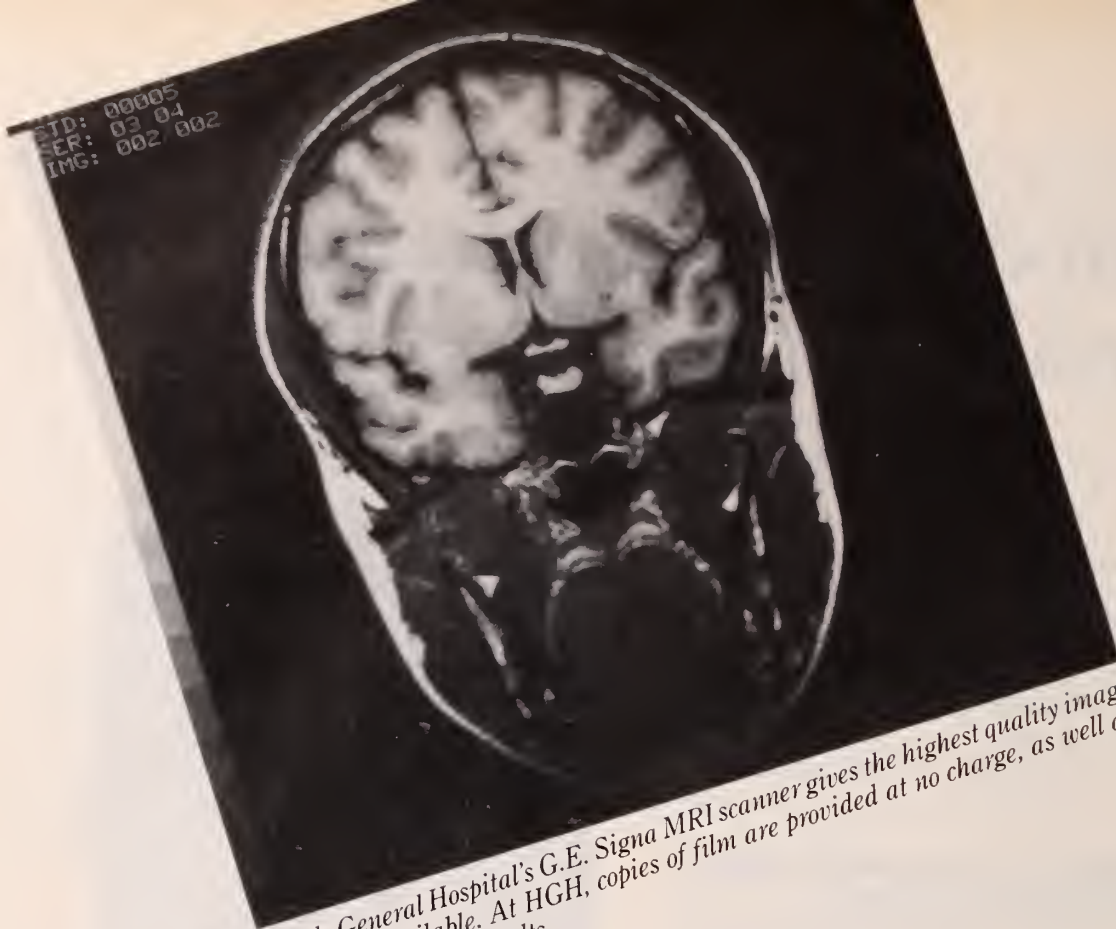
Perhaps you are considering purchasing an existing practice and need:

- Someone with experience to consult with in the process, or
- Someone to act as your agent.

After 11 years of providing the above services for physicians in West Central Alabama, I have decided to serve all physicians in this capacity. I am available and can assist you with these and many other services related to practice management. For more information, please contact me at 205-556-8457.

QUALITY HEALTH RESOURCES

Post Office Box 6002 • Tuscaloosa, Alabama 35405 • (205) 556-8457
A Christian Organization — Operated on Christian principles.



Hinds General Hospital's G.E. Signa MRI scanner gives the highest quality image currently available. At HGH, copies of film are provided at no charge, as well as same-day written results.

AT HINDS GENERAL, QUALITY MRI SCANNING IS JUST PART OF THE PICTURE.

We understand the tremendous demands of being a physician. Not just in terms of knowledge. But in terms of time.

So, in addition to bringing you the latest in medical technology, we do all we can to make a tough job just a little bit easier.

That means giving you extra services and amenities that you might not normally expect. Like same-day written results. Copies of film upon request, at no charge. Convenient free parking. And we always welcome out-of-town referrals.

Magnetic Resonance Imaging is one more

example of our commitment to remain at the forefront of medical technology. And that's what the Technology of Caring is all about: state-of-the-art medicine and a very special ingredient called HindsCare.SM

HINDS GENERAL

H O S P I T A L

The Technology of Caring.SM
1850 Chadwick Drive/Jackson, MS 39204/601-376-1000

©1988 Hinds General Hospital. All rights reserved.

NEW MEMBERS

CALILOUETTE, RAYMOND K., Picayune. Born New Orleans, Feb. 4, 1956; M.D., Louisiana State University Medical Center, New Orleans, 1982; interned one year, Charity Hospital, New Orleans; general surgery residency, Louisiana State University Medical Center, New Orleans, 1983-87; elected by Pearl River Medical Society.

CARR, GARY, Hattiesburg. Born Iuka, MS., March 29, 1954; M.D., University of Mississippi School of Medicine, Jackson, 1984; interned and family practice residency, University of Mississippi Medical Center, Jackson, 1984-87; elected by North Mississippi Medical Society.

CHIANG, T. DEREK, Biloxi. Born Shenyang, China, July 21, 1934; M.D., National Taiwan University College of Medicine, 1959; interned one year, Cumberland Hospital, Brooklyn, NY, 1962-63; internal medicine residency, Albert Einstein Medical Center, Philadelphia, PA, 63-64; neurology residency, Northwestern University Medical Center, Chicago, 1964-67; elected to associate membership by Coast Counties Medical Society.

CLEMENTS, J. WESLEY, Brandon. Born Carrollton, MS, Jan. 7, 1958; M.D., University of Mississippi School of Medicine, Jackson, 1984; interned and medicine residency, University Medical Center, Jackson, 1984-87; elected by West Mississippi Medical Society.

DIDLAKE, RALPH H., Jackson. Born Albuquerque, NM, Sept. 9, 1953; M.D., University of Mississippi School of Medicine, 1979; interned and surgery residency, University Medical Center, Jackson, 1979-85; elected by Central Medical Society.

DOTHEROW, DARLENE G., Jackson. Born Gulfport, Dec. 10, 1954; M.D., University of Mississippi School of Medicine, Jackson, 1986; interned and medicine residency, University Medical Center, Jackson, 1986-87; elected by Central Medical Society.

FAIN, KATHY J., Keesler. Born Ripley, MS, Sept. 14, 1953; M.D., University of Mississippi School of Medicine, Jackson, 1980; interned one year, USAF Medical Center, Keesler AFB, MS; radiology oncology residency, Loma Linda University Medical Center, Loma Linda, CA, 1983-87; elected by Coast Counties Medical Society.

JOHNSON, JACK L., Jackson. Born Memphis, Feb. 13, 1956; M.D., University of Mississippi School of Medicine, Jackson, 1983; interned and family practice residency, University Medical Center, Jackson, 1983-86; elected by Central Medical Society.

KENNEDY, RONALD E., Jackson. Born Kosciusko, March 11, 1951; M.D., University of Mississippi School of Medicine, Jackson, 1978; interned and surgery and cardiovascular surgery residency, Baylor College of Medicine and affiliated Hospital, Houston, TX, 1978-85; elected by Central Medical Society.

LUCAS, JOHN F., III, Greenwood. Born New Orleans, Oct. 24, 1955; M.D., Duke University School of Medicine, Durham, NC, 1981; interned and surgery residency, same, 1981-88; elected by Delta Medical Society.

MCIVER, WILLIAM BLAIR, Columbus. Born Edmonton, Canada, April 21, 1944; M.D., University of Alberta School of Medicine, Edmonton, Canada, 1968; interned and anesthesia and medicine residency, Royal Alexandra Hospital, Edmonton, Canada, 1968-73; elected by Prairie Medical Society.

MEDICAL CLINIC For Sale or Lease

Due to retirement, physician who has been at this location since 1955 wishes to sell or lease medical clinic. All medical equipment, including lab and x-ray, furniture and fixtures included.

2000 square-foot building on 30 × 208.6 lot with parking in the rear. Prime Northeast Jackson location, convenient to area hospitals. Two consultation rooms, three exam rooms, minor surgery room, nurse's office, laboratory and x-ray. Ideal for 2 doctors.

For more information, please contact:

Mr. Jack Lowery
Deposit Guaranty National Bank
Trust Division
601-354-8118

NEW MEMBERS/Continued

MILHORN, HOWARD T., Jackson. Born Kingsport, TN, Oct. 30, 1936; M.D., University of Mississippi School of Medicine, Jackson, 1975; interned and family practice residency, same, 1977-1980; elected by Central Medical Society.

PHILLIPS, DOUGLAS C., Monticello. Born Wichita Falls, TX, Dec. 29, 1953; M.D., University of Mississippi School of Medicine, Jackson, 1983; interned and family medicine residency, University Medical Center, Jackson, 1983-86; elected by South Central Medical Society.

RICE, STEVEN N., Olive Branch. Born Birmingham, Feb. 1, 1950; M.D., Tulane University School of Medicine, New Orleans, 1976; interned Baptist Memorial Hospital, Memphis, one year; psychiatry residency, University of Tennessee Medical Center, Memphis, 1979-82; elected by North Mississippi Medical Society.

SAVOIE, FELIX H., III, Jackson. Born Napoleonville, LA, Oct. 11, 1956; M.D., Louisiana State University Medical Center, New Orleans, 1982; in-

terned and orthopedic surgery residency, University of Mississippi Medical Center, Jackson, 1982-87; hand and microvascular fellowship, Medical College of Wisconsin, Milwaukee, 7/87-12/87; arthroscopy and sports medicine fellowship, Orthopaedic Research of Virginia, Richmond, Jan.-August, 1988; elected by Central Medical Society.

SEXTON, HAROLD, Water Valley; Born Memphis, Nov. 7, 1935; M.D., University of Tennessee College of Medicine, Memphis, 1967; interned and medicine and pathology residency, Baptist Hospital, Memphis, 1967-73; elected by North Mississippi Medical Society.

TOMPKINS, ERIC R., Jackson. Born Washington, DC, Oct. 1, 1958; M.D., University of Mississippi School of Medicine, Jackson, 1984; interned and medicine residency, University Medical Center, Jackson, 1984-87; elected by Central Medical Society.

WADE, FRANK C., JR., Magee. Born Jackson, MS, July 25, 1958; M.D., University of Mississippi School of Medicine, Jackson, 1983; interned and family medicine residency, University Medical Center, Jackson, 1984-87; elected by Central Medical Society.

"A Sign of the Times!"



SALES — SERVICE — LEASING

HARRELD CHEVY-OLDS

Call Toll-free 1-800-451-3908

Medico-Legal Brief

BC/BS Guilty of Antitrust Violations

Blue Cross and Blue Shield of Kansas was guilty of violations of federal antitrust laws and tortious interference with prospective business relations under state law, a federal trial court in Kansas ruled.

On August 30, 1985, Blue Cross announced its intention to terminate its contracting provider agreement with a hospital, effective January 1, 1986. The termination followed the sale of the hospital's assets to a for-profit hospital management company, which also acquired a local HMO and a medical insurance company, all of which were in direct competition with Blue Cross. As a result of termination of the provider agreement, Blue Cross would not pay the hospital directly for services rendered to its subscribers and the subscribers would be liable for any charges in excess of the amounts Blue Cross paid for covered services.

On November 12, 1985, the hospital and others filed a 17-count complaint against Blue Cross for violation of federal antitrust laws and state laws. The complaint charged that Blue Cross restrained trade in the Kansas health care service and insurance industries and attempted to create a monopoly in the health care insurance market, to the detriment of Kansas health care consumers generally and the complainants in particular. The complaint also sought damages for interference with their present and future business relations with third parties.

After a jury trial, the court ruled on various motions of the parties. The activities of Blue Cross were not exempt from antitrust liability under the business of insurance rule found in the McCarren-Ferguson Act. All activities of insurance companies restraining trade and competition in the insurance market were not exempt, the court said. The activities in question flowed not from the insurer's rate-making activities but from a conspiratorial termination of a contract with a particular hospital, a threat to other hospitals, and related activities surrounding the insurer's provider agreements.

Blue Cross had market and monopoly power for purposes of antitrust law because its share of the relevant market was 60 per cent, that it was roughly 15 times larger than its next largest competitor in the market, and the "most favored nations" clause in its provider contracts prevented competing insurance companies from offering more favorable

(Continued on page 220)



Most patients need only one.

K-DURTM 20 Microburst
(potassium chloride) 20mEq Release
Sustained Release System
Tablets

**A daily prophylactic dose
in a single tablet.**

Please see next page for brief summary of prescribing information.

JULY 1988

KEY Key Pharmaceuticals, Inc.
Kenilworth, NJ 07033
World leader in drug delivery systems.

Copyright © 1987, Key Pharmaceuticals, Inc., Kenilworth, NJ 07033.
All rights reserved. KD-2055/14238603H 8/87

INDICATIONS AND USAGE: BECAUSE OF REPORTS OF INTESTINAL AND GASTRIC ULCERATION AND BLEEDING WITH SLOW-RELEASE POTASSIUM CHLORIDE PREPARATIONS, THESE DRUGS SHOULD BE RESERVED FOR THOSE PATIENTS WHO CANNOT TOLERATE OR REFUSE TO TAKE LIQUID OR EFFERVESCENT POTASSIUM PREPARATIONS OR FOR PATIENTS IN WHOM THERE IS A PROBLEM OF COMPLIANCE WITH THESE PREPARATIONS.

1. For therapeutic use in patients with hypokalemia with or without metabolic alkalosis, in digitalis intoxication and in patients with hypokalemic familial periodic paralysis.

2. For the prevention of potassium depletion when the dietary intake is inadequate in the following conditions: Patients receiving digitalis and diuretics for congestive heart failure, hepatic cirrhosis with ascites, states of aldosterone excess with normal renal function, potassium-losing nephropathy, and with certain diarrheal states.

3. The use of potassium salts in patients receiving diuretics for uncomplicated essential hypertension is often unnecessary when such patients have a normal dietary pattern. Serum potassium should be checked periodically, however, and if hypokalemia occurs, dietary supplementation with potassium-containing foods may be adequate to control milder cases. In more severe cases supplementation with potassium salts may be indicated.

CONTRAINDICATIONS: Potassium supplements are contraindicated in patients with hyperkalemia since a further increase in serum potassium concentration in such patients can produce cardiac arrest. Hyperkalemia may complicate any of the following conditions: Chronic renal failure, systemic acidosis such as diabetic acidosis, acute dehydration, extensive tissue breakdown as in severe burns, adrenal insufficiency, or the administration of a potassium-sparing diuretic (e.g., spironolactone, triamterene).

Wax-matrix potassium chloride preparations have produced esophageal ulceration in certain cardiac patients with esophageal compression due to enlarged left atrium.

All solid dosage forms of potassium chloride supplements are contraindicated in any patient in whom there is cause for arrest or delay in tablet passage through the gastrointestinal tract. In these instances, potassium supplementation should be with a liquid preparation.

WARNINGS: Hyperkalemia—In patients with impaired mechanisms for excreting potassium, the administration of potassium salts can produce hyperkalemia and cardiac arrest. This occurs most commonly in patients given potassium by the intravenous route but may also occur in patients given potassium orally. Potentially fatal hyperkalemia can develop rapidly and be asymptomatic. The use of potassium salts in patients with chronic renal disease, or any other condition which impairs potassium excretion, requires particularly careful monitoring of the serum potassium concentration and appropriate dosage adjustment.

Interaction with Potassium-Sparing Diuretics—Hypokalemia should not be treated by the concomitant administration of potassium salts and a potassium-sparing diuretic (e.g., spironolactone or triamterene) since the simultaneous administration of these agents can produce severe hyperkalemia.

Gastrointestinal Lesions—Potassium chloride tablets have produced stenotic and/or ulcerative lesions of the small bowel and deaths. These lesions are caused by a high localized concentration of potassium ion in the region of a rapidly dissolving tablet, which injures the bowel wall and thereby produces obstruction, hemorrhage or perforation.

K-DUR tablets contain micro-crystalloids which disperse upon disintegration of the tablet. These micro-crystalloids are formulated to provide a controlled release of potassium chloride. The dispersibility of the micro-crystalloids and the controlled release of ions from them are intended to minimize the possibility of a high local concentration near the gastrointestinal mucosa and the ability of the KCl to cause stenosis or ulceration. Other means of accomplishing this (e.g., incorporation of potassium chloride into a wax matrix) have reduced the frequency of such lesions to less than one per 100,000 patient years (compared to 40–50 per 100,000 patient years with enteric-coated potassium chloride) but have not eliminated them. The frequency of GI lesions with K-DUR tablets is, at present, unknown. K-DUR tablets should be discontinued immediately and the possibility of bowel obstruction or perforation considered if severe vomiting, abdominal pain, distention, or gastrointestinal bleeding occurs.

Metabolic Acidosis—Hypokalemia in patients with metabolic acidosis should be treated with an alkalinizing potassium salt such as potassium bicarbonate, potassium citrate, potassium acetate, or potassium gluconate.

PRECAUTIONS: The diagnosis of potassium depletion is ordinarily made by demonstrating hypokalemia in a patient with a clinical history suggesting some cause for potassium depletion. In interpreting the serum potassium level, the physician should bear in mind that acute alkalosis per se can produce hypokalemia in the absence of a deficit in total body potassium while acute acidosis per se can increase the serum potassium concentration into the normal range even in the presence of a reduced total body potassium. The treatment of potassium depletion, particularly in the presence of cardiac disease, renal disease, or acidosis requires careful attention to acid-base balance and appropriate monitoring of serum electrolytes, the electrocardiogram, and the clinical status of the patient.

Laboratory Tests: Regular serum potassium determinations are recommended. In addition, during the treatment of potassium depletion, careful attention should be paid to acid-base balance, other serum electrolyte levels, the electrocardiogram, and the clinical status of the patient, particularly in the presence of cardiac disease, renal disease, or acidosis.

Drug Interactions: Potassium-sparing diuretics; see **WARNINGS**.

Carcinogenesis, Mutagenesis, Impairment of Fertility: Long-term carcinogenicity studies in animals have not been performed.

Pregnancy Category C: Animal reproduction studies have not been conducted with K-DUR. It is also not known whether K-DUR can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. K-DUR should be given to a pregnant woman only if clearly needed.

Nursing Mothers: The normal potassium ion content of human milk is about 13 mEq per liter. Since oral potassium becomes part of the body potassium pool, so long as body potassium is not excessive, the contribution of potassium chloride supplementation should have little or no effect on the level in human milk.

Pediatric Use: Safety and effectiveness in children have not been established.

ADVERSE REACTIONS: One of the most severe adverse effects is hyperkalemia (see **CONTRAINDICATIONS**, **WARNINGS**, and **OVERDOSSAGE**). There have also been reports of upper and lower gastrointestinal conditions including obstruction, bleeding, ulceration, and perforation (see **CONTRAINDICATIONS** and **WARNINGS**); other factors known to be associated with such conditions were present in many of these patients.

The most common adverse reactions to oral potassium salts are nausea, vomiting, abdominal discomfort, and diarrhea. These symptoms are due to irritation of the gastrointestinal tract and are best managed by taking the dose with meals or reducing the dose.

Skin rash has been reported rarely.

OVERDOSSAGE: The administration of oral potassium salts to persons with normal excretory mechanisms for potassium rarely causes serious hyperkalemia. However, if excretory mechanisms are impaired or if potassium is administered too rapidly intravenously, potentially fatal hyperkalemia can result (see **CONTRAINDICATIONS** and **WARNINGS**). It is important to recognize that hyperkalemia is usually asymptomatic and may be manifested only by an increased serum potassium concentration and characteristic electrocardiographic changes (peaking of T-waves, loss of P-waves, depression of S-T segment, and prolongation of the QT-interval). Late manifestations include muscle-paralysis and cardiovascular collapse from cardiac arrest.

Treatment measures for hyperkalemia include the following:

1. Elimination of foods and medications containing potassium and of potassium-sparing diuretics.
2. Intravenous administration of 300 to 500 ml/hr of 10% dextrose solution containing 10–20 units of insulin per 1,000 ml.

3. Correction of acidosis, if present, with intravenous sodium bicarbonate.

4. Use of exchange resins, hemodialysis, or peritoneal dialysis.

In treating hyperkalemia, it should be recalled that in patients who have been stabilized on digitalis, too rapid a lowering of the serum potassium concentration can produce digitalis toxicity.

MEDICO-LEGAL/Continued

rates. Under that clause the provider must always offer Blue Cross any lower rates it offered to any competitor.

There was evidence to support the jury's finding that the hospital suffered damages in the amount of \$1.54 million from the illegal conspiracy. It was entitled to only a nominal one dollar in damages on its tortious interference with business claims because the jury was instructed that the actual damages award for tortious interference should be limited to a nominal amount if the hospital suffered no different or distinct damages or losses from tortious interference than those suffered from the antitrust violations.

The hospital was properly awarded \$750,000 in punitive damages on those claims, the court said. The total amount awarded, including the treble damage award under the antitrust statute, was \$5,378,941.00.

In addition, the court awarded the complainants \$2,423,828.74 in attorney's fees and other costs.

The court dismissed counterclaims against the complainants by Blue Cross. — *Reazin v. Blue Cross and Blue Shield of Kansas, Inc.*, 663 F.Supp. 1360 (D.C., Kan., May 22, 1987)

Doctor, Can You Use Any Of These MSMA Information Services?

- Literature for your patients explaining why health care costs are going up
- Information on how you can conduct a patient survey in your practice
- CommuniCare brochures
- AIDS Speakers Bureau
- Marketing Tips for Physicians

(Contact MSMA today to request any of these materials or services.)

FAMILY PRACTICE. A REWARDING EXPERIENCE IN ARMY MEDICINE.

The Army has more soldiers with families than ever before. So when you join the Army Medical Team as a Family Practitioner, expect to spend most of your time serving not only soldiers, but their spouses and children, too. What's more, you won't have to worry about the paperwork, malpractice insurance premiums, or the costs incurred in running a private practice.

Expect to work in a highly challenging and varied environment. Working with a team of highly trained professionals, you can receive assignments almost anywhere in the United States; the Army offers the largest system of comprehensive health care in the nation. Family Practice positions are also available overseas, in Germany and Korea.

The benefits package available to Army Family Practitioners is quite attractive. You'll receive 30 days paid vacation, opportunities to continue education and conduct research, a chance to travel, and reasonable work hours.

All in all, your Army Family Practice will be a rewarding experience. Not only for you, but for Army families, too. Talk to your Army Medical Department Counselor for more information.



**ARMY MEDICINE
144 ELK PLACE, SUITE 1514
NEW ORLEANS, LA 70112-2640
(504) 522-1871 COLLECT**

ARMY MEDICINE. BE ALL YOU CAN BE.

PLACEMENT SERVICE

PHYSICIANS AVAILABLE

PHYSICIAN COMPLETING RESIDENCY in obstetrics and gynecology seeks practice opportunity in Mississippi. Available July 1989. Contact Greg Patton, M.D., 2325 Glenmary avenue #2, Louisville, KY 40204.

EXPERIENCED PHYSICIAN, seeking licensure, wants position as assistant, Location flexible. P.O. Box 225, Bay Springs, MS 39422.

PHYSICIAN completing residency in general surgery, and spouse (board-eligible pediatrician) seek practice opportunities in Mississippi. Location flexible. Contact Dinesh Ranjan, M.D., 2118 Chantilla Rd., Catonsville, Md 21228.

NATIVE MISSISSIPPIAN seeking practice opportunity in Ob-Gyn. Will complete residency and be available in July 1989. Contact Walter Wolfe, M.D. 722 West Austin Dr., Peoria, IL 61614; (309) 655-2000.

PHYSICIANS WANTED

EMERGENCY PHYSICIANS WANTED. Part-time and full-time positions in northeast Mississippi. Call (601) 328-8385.

ORTHOPAEDIC SURGEON, UROLOGIST, ENT needed immediately for solo practice in Stuttgart, Arkansas, the Rice and Duck Hunting capital of the world. Modern hospital facilities and equipment. Family oriented community. Excellent schools. Call Jim Bushmaier at (505) 673-3511.

A Commitment to Excellence in Health Care

Mississippi Emergency Association, P.A. (MEA) a physician-owned and managed group has created an environment for physicians that promotes the ideals of private practice while freeing doctors from the administrative and financial demands of the private practitioner.

Board certified or board eligible physicians in the area of Emergency Medicine, Internal Medicine, and Family Medicine are presented a variety of professional and personal rewards, including excellent salaries, benefits, and advancement opportunities.

MEA is a dynamic, growing corporation that delivers quality health care. If you would like to know what career opportunities we can offer you, send your curriculum vitae to Sheila M. Stringer or call (601) 366-6503.

**Mississippi Emergency
Association, P.A.
P.O. Box 12917
Jackson, MS 39236-2917**

PHYSICIANS NEEDED

Physicians (especially specialists such as ophthalmologists, pediatricians, orthopedists, neurologists, etc.) interested in performing consultative evaluations (according to Social Security guidelines) should contact the Medical Relations Office. WATS 1-800-962-2230; Jackson, 922-6811; extensions 2276, and 2190.



**DISABILITY DETERMINATION SERVICES
1-800-962-2230**

TWO FAMILY MEDICINE PHYSICIANS needed to fill vacancies. Options of practice include: (a) partnership with local well-established Family Physician who has excellent practice. Terms negotiable with this physician; (b) solo practice with contract that includes guaranteed salary, office, staff, malpractice insurance, supplies and moving costs. Franklin County Hospital meets HMSA criteria. The county is rural, has excellent school system, and is within 30 minutes of three larger cities with established referral system. Call (601) 384-5801; Bill Martin, Administrator, Franklin County Hospital, Meadville, MS.

PHYSICIANS desired in areas of Family Practice, Pediatrics, and Internal Medicine. Send resume to Greater Meridian Health Clinic, 2700 6th Street, Meridian, MS 39301; or call (601) 693-0151.

NORTH ALABAMA ESTABLISHED SURGICAL PRACTICE FOR SALE. BC/BE, vascular and endoscopy capability a must. Great financial incentives. Call Eileen Wallach collect at (404) 393-1210.

CLASSIFIED

X-RAY MACHINE in excellent condition, medical supplies and equipment, waiting room furniture. Best offer. Call (601) 328-0830.

2V STAT STAT STAT STAT STAT STAT
Software and knowledge base for diagnoses and treatment, covering 69 different medical specialties; \$95 for demo disk. The more you know, the better you treat. The most updated medical algorithms at your fingertips! ! 2V MedTech Corporation, 2480 Windy Hill Road, Suite 201, Marietta, GA 33067. (404) 956-1855; Telex 55134/Medvideo.

For information about the *Journal's* classified section or placement service, please contact the Managing Editor, P.O. Box 5229, Jackson, MS 39216.

Index to Advertisers

CancerPay Plus	211	OffiSource	198
Ciba Pharmaceuticals	199, 200	Premier Printing	193
Disability Determination Service	222	Quality Health Resources	215
Hinds General Hospital	216	Roche Laboratories	third, fourth covers
Harrel Chevrolet-Oldsmobile	218	St. Stanislaus	4
Key Pharmaceuticals	219, 220	Trustmark	214
Lakeshore Systems	11	University of Alabama	6, 7
Eli Lilly and Co.	12	U. S. Army Reserve	194, 10A
Medical Assurance Co. of Miss.	second cover	U.S. Army/Active	221
Miss. Emergency Association	222	Jon Wimbish	8
MSMA Benefit Plan and Trust	212	Smith Kline and French	10B
Northtowne Printers	213		

Who would say something nice about a bill collector?

Over 1,200 professional and trade associations, including yours.

It's true. The bill collecting services of I.C. System have been endorsed by over 1,200 associations around the country, including the one you belong to.

We're proud of these endorsements. We've made a concerted effort to bring high standards of professionalism, ethics, and effectiveness to the collection process. We believe we've succeeded and, apparently, your association agrees.

So if you've been billing people who aren't paying you, now you know who to contact.

Although we're headquartered in St. Paul, Minnesota, we have communication centers in every state of the union. We'll assign a local I.C. representative to your account who will be supported by a full range of collection services and

personnel, including carefully-trained telephone contact specialists. We'll even provide initial training on how to use our service for the person(s) in your office handling accounts receivable.

But most important, we *guarantee* results. Our fee structure combines a very competitive commission rate with a retainer (corporate or standard) scaled to your needs. And we guarantee to keep collecting for as long as it takes to recover *at least ten times the amount of that retainer*.

To find out how the I.C. System approach can work for you, call toll free (800) 824-9469, ext. 330. In Minnesota, call (612) 483-8201, ext. 330. Or return the coupon.



I want to recover the money that's owed me. Please provide me with information on the I.C. System approach.

3386

Name _____

Title _____

Firm _____

Address _____

City _____ State _____ Zip _____

Telephone number _____

Mail to: I.C. System, Inc., 444 East Highway 96, P.O. Box 64639, St. Paul, Minnesota 55164-0639

In moderate depression and anxiety

- ➡ 74% of patients experienced improved sleep after the first *h.s.* dose¹
- ➡ First-week improvement in somatic symptoms¹
- ➡ 50% greater improvement with Limbitrol in the first week than with amitriptyline alone²

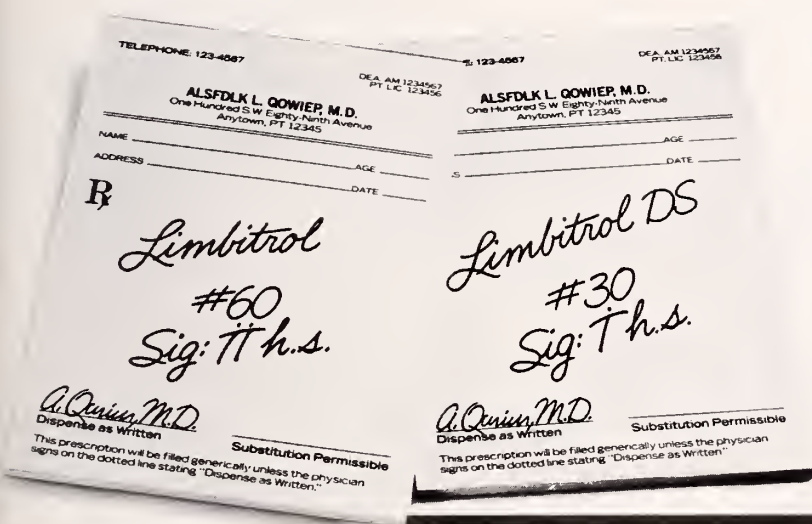
Protect Your Prescribing Decision:
Specify "Do not substitute."

Limbitrol®

Each tablet contains 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt) (V)

Limbitrol DS®

Each tablet contains 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt) (V)



References: 1. Data on file, Hoffmann-La Roche Inc., Nutley, NJ. 2. Feighner VP, et al: *Psychopharmacology* 61:217-225, Mar 22, 1979.

Limbitrol® (V)

Tranquilizer—Antidepressant

Before prescribing, please consult complete product information, a summary of which follows:

Contraindications: Known hypersensitivity to benzodiazepines or tricyclic antidepressants; concomitant use with MAOIs or within 14 days of monoamine oxidase inhibitors (then initiate cautiously, gradually increasing dosage until optimal response is achieved); during acute recovery phase following myocardial infarction.

Warnings: Use with caution in patients with history of urinary retention or angle-closure glaucoma. Severe constipation may occur when used with anticholinergics. Closely supervise cardiovascular patients. Arrhythmias, sinus tachycardia, prolongation of conduction time, myocardial infarction and stroke reported with tricyclic antidepressants, especially in high doses. Caution patients about possible combined effects with alcohol and other CNS depressants and against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving).

Usage in Pregnancy: Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations. Consider possibility of pregnancy when instituting therapy.

Withdrawal symptoms of the barbiturate type have occurred after discontinuation of benzodiazepines (see Drug Abuse and Dependence).

Precautions: Use cautiously in patients with a history of seizures, in hyperthyroid patients, those on thyroid medication, patients with impaired renal or hepatic function. Because of suicidal ideation in depressed patients, do not permit easy access to large quantities of drug. Periodic liver function tests and blood counts recommended during prolonged treatment. Amitriptyline may block action of guanethidine or similar antihypertensives. When tricyclic antidepressants are used concomitantly with cimetidine (Tagamet), clinically significant effects have been reported involving delayed elimination and increasing steady-state concentrations of the tricyclic drugs. Use of Limbitrol with other psychotropic drugs has not been evaluated; sedative effects may be additive. Discontinue several days before surgery. Limit concomitant administration of ECT to essential treatment. See Warnings for precautions about pregnancy. Should not be taken during the nursing period or by children under 12. In elderly and debilitated, limit to smallest effective dosage to preclude ataxia, oversedation, confusion or anticholinergic effects. Inform patients to consult physician before increasing dose or abruptly discontinuing this drug.

Adverse Reactions: Most frequent: drowsiness, dry mouth, constipation, blurred vision, dizziness, bloating. Less frequent: vivid dreams, impotence, tremor, confusion, nasal congestion. Rare: granulocytopenia, jaundice, hepatic dysfunction. Others: many symptoms associated with depression including anorexia, fatigue, weakness, restlessness, lethargy.

Adverse reactions not reported with Limbitrol but reported with one or both components or closely related drugs: **Cardiovascular:** Hypotension, hypertension, tachycardia, palpitations, myocardial infarction, arrhythmias, heart block, stroke. **Psychiatric:** Euphoria, apprehension, poor concentration, delusions, hallucinations, hypomania, increased or decreased libido. **Neurologic:** Incoordination, ataxia, numbness, tingling and paresthesias of the extremities, extrapyramidal symptoms, syncope, changes in EEG patterns. **Anticholinergic:** Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract. **Allergic:** Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus. **Hematologic:** Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia. **Gastrointestinal:** Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, black tongue. **Endocrine:** Testicular swelling, gynecomastia in the male, breast enlargement, galactorrhea and minor menstrual irregularities in the female, elevation and lowering of blood sugar levels, and syndrome of inappropriate ADH (antidiuretic hormone) secretion. **Other:** Headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, jaundice, alopecia, parotid swelling.

Drug Abuse and Dependence: Withdrawal symptoms similar to those noted with barbiturates and alcohol have occurred following abrupt discontinuance of chlordiazepoxide; more severe seen after excessive doses over extended periods; milder after taking continuously at therapeutic levels for several months. Withdrawal symptoms also reported with abrupt amitriptyline discontinuation. Therefore, after extended therapy, avoid abrupt discontinuation and taper dosage. Carefully supervise addiction-prone individuals because of predisposition to habituation and dependence.

Overdosage: Immediately hospitalize patient. Treat symptomatically and supportively. I.V. administration of 1 to 3 mg physostigmine salicylate may reverse symptoms of amitriptyline poisoning. See complete product information for manifestation and treatment.

How Supplied: Double strength (DS) Tablets, white, film-coated, each containing 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt), and Tablets, blue, film-coated, each containing 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt)—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 50.



ROCHE PRODUCTS INC.
Manati, Puerto Rico 00701

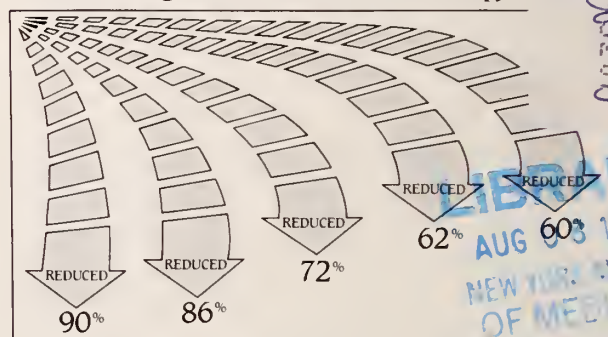
In the depressed and anxious patient

See Improvement In The First Week And The Weeks That Follow

- ➡ 74% of patients experienced improved sleep after the first *h.s.* dose¹
- ➡ First-week reduction in somatic symptoms¹

Caution patients about the combined effects of Limbitrol with alcohol or other CNS depressants and about activities requiring complete mental alertness, such as operating machinery or driving a car. In general, limit dosage to the lowest effective amount in elderly patients.

Percentage of Reduction in Individual Somatic Symptoms During First Week of Limbitrol Therapy*



VOMITING NAUSEA HEADACHE ANOREXIA CONSTIPATION

*Patients often presented with more than one somatic symptom.

Limbitrol®

Each tablet contains 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt) (V)

Limbitrol DS®

Each tablet contains 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt) (V)

Copyright © 1988 by Roche Products Inc. All rights reserved.
Please see summary of product information inside back cover.

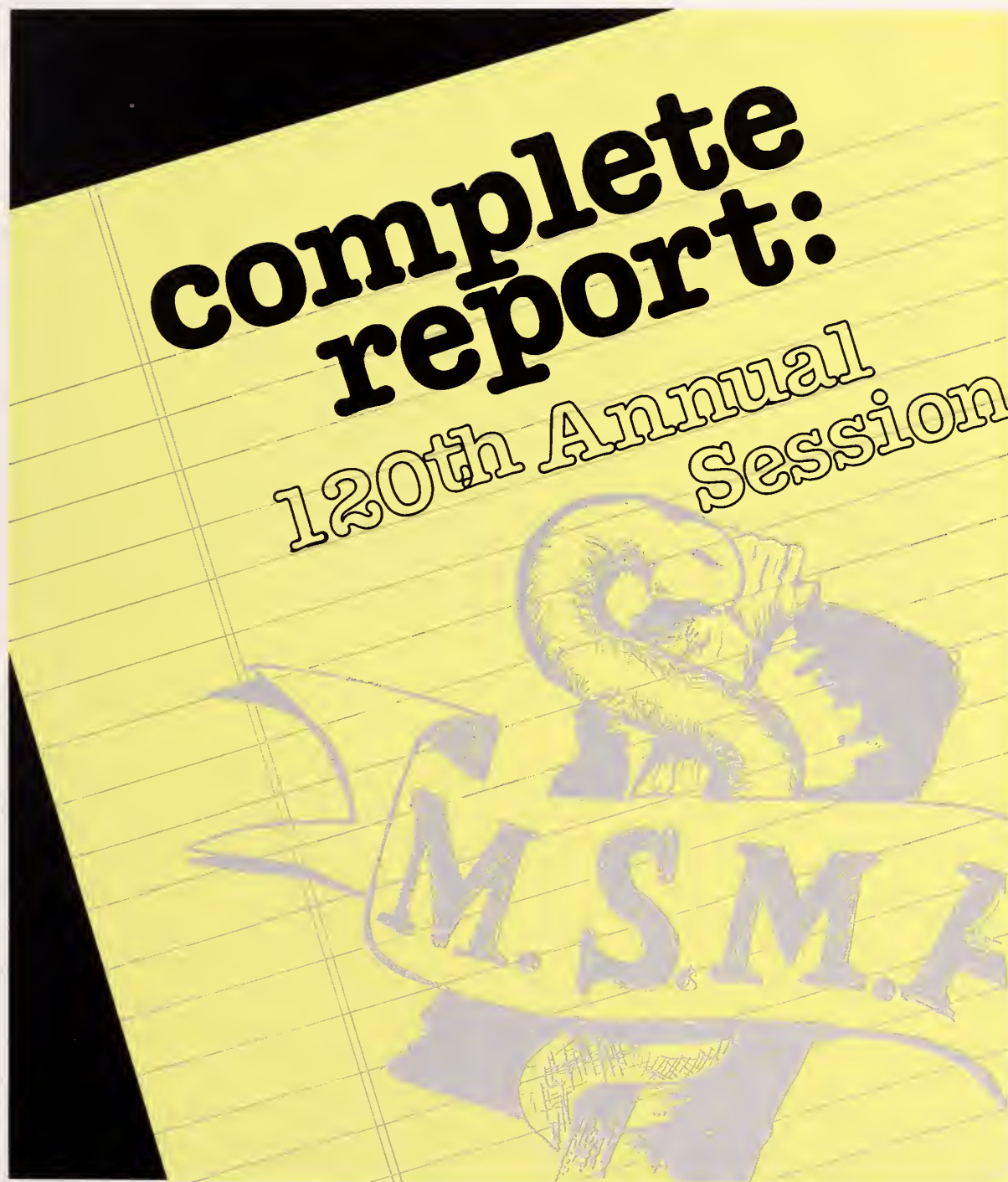


JOURNAL

OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION

AUGUST

1988



There is strength in numbers. (And our numbers are growing.)



Seated, Left to Right: Cheryl Maxwell (Claims Secretary), Lisa Noble (Underwriting Secretary), Maria Graham (Claims Secretary), Kim Ormond (Receptionist), Mike Houpt (General Manager), and C.G. "Tanny" Sutherland, M.D. (Medical Director)

Standing, Left to Right: C.R. "Bob" Montgomery (General Counsel), Lisa Stewart (Underwriting Secretary), Sharon Thompson (Claims Secretary), Craig Brown (Underwriting Manager), Joey Grimes (Controller), Chuck Dunn (Assistant General Manager), and Debbie Sutherland (Bookkeeper)

Since we wrote our first policy in November of 1977, we have grown to serve more physicians than any other medical liability insurance company in Mississippi.

Why do more physicians turn to Medical Assurance Company? Our staff has grown from two in 1978 to five in 1983 to twelve in 1988, and we have plans for additional staff even now. We have insurance professionals who can provide efficient and cost-effective

answers to your medical liability insurance questions. We serve more than 1800 Mississippi doctors – providing savings and financial strength through a program of sound investments and underwriting guidelines. Every claim is reviewed by a panel of medical and legal claims experts.

So call or come visit our staff at our offices on Riverside Drive. Let us show you *our* strength in numbers.



Medical Assurance Company of Mississippi

Street Address: Suite 301

735 Riverside Drive, Jackson, MS

Phone: (601) 353-2000

Mailing Address: P.O. Box 4915, Jackson, MS 39216-0915

MS WATS: 1-800-325-4172

JOURNAL

OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION

AUGUST 1988

VOLUME XXIX

NUMBER 8

SCIENTIFIC

- Late Left Ventricular Function 223
Following Angioplasty in Acute
Myocardial Infarction

*Thad F. Waites, M.D., and
Edward Genton, M.D.*

- Desmoid Tumors: Report of a Case 227
Responsive to Antiestrogen and
Review of the Literature

*Lodovico Balducci, M.D., Diana D. Little,
R.N., Robert Spencer, M.D., and
Tawfiq Khansur, M.D.*

SPECIAL ARTICLES

- Address of the President 231

W. Lamar Weems, M.D.

- Report of the 120th Annual Session 237

EDITORIALS

- Attending the House of Medicine 234

David R. Steckler, M.D.

- Borborygmia I 235

Joe Johnston, M.D.

DEPARTMENTS

- News 247

- Personals 253

- Postgraduate Calendar 252

- Medico-Legal Brief 255

- Placement Service 258

EDITOR

Myron W. Lockey, M.D.

EDITOR EMERITUS

W. Moncure Dabney, M.D.

ASSOCIATE EDITORS

George E. Abraham, M.D.

Joseph E. Johnston, M.D.

MANAGING EDITOR

Patsy Silver

PUBLICATIONS COMMITTEE

Richard C. Miller, M.D.,
Chairman

George H. Martin, M.D.

William J. Gibson, M.D.
and the editors

THE ASSOCIATION

David R. Steckler, M.D.
President

J. Ed Hill, M.D.
President-Elect

Don Q. Mitchell, M.D.
Secretary-Treasurer

James C. Waites, M.D.
Speaker

H. Vann Craig, M.D.
Vice Speaker

Charles L. Mathews
Executive Director

Copyright© 1988, Mississippi State Medical Association. The views expressed in this publication reflect the opinions of the authors and do not necessarily state the opinions or policies of the Mississippi State Medical Association.

THE JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION (ISSN 0026-6393) is owned and published monthly by the Mississippi State Medical Association, founded 1856, at 735 Riverside Drive, Jackson, Mississippi 39202. Subscription rate, \$25.00 per annum; \$35.00 per annum for foreign subscriptions; \$2.25 per copy, as available. Advertising rates furnished on request. Printed by The Ovid Bell Press, Inc., Fulton, Missouri. Second-class postage paid at Jackson, Mississippi, and at additional mailing offices. POSTMASTER: Send address changes to Mississippi State Medical Association, P.O. Box 5229, Jackson, Mississippi 39216.

AIM HIGH

HEALTH CARE AT ITS BEST

★

AIR FORCE MEDICINE

★

Air Force medicine is one of our best benefits. The Air Force needs physicians such as you to keep it that way.

Most administrative responsibilities are in the hands of others, giving you the time to give full attention to the patients' needs. Our hospitals are staffed with dedicated, competent professionals to assist you.

You'll have time for your family and to keep abreast of the latest methods and technologies that you don't have time for now. We also offer unlimited professional development and financial security.

Find out more about Air Force medicine. Contact your nearest Air Force recruiter. Call

USAF HEALTH PROFESSIONS
501-985-2225
COLLECT



NEWSLETTER

August 1988

Dear Doctor:

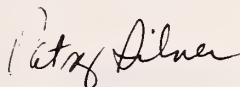
Congress should encourage states to establish health insurance risk pools as an essential mechanism for extending protection to the uninsured, said AMA executive vice president James H. Sammons, MD, in a letter to House-Senate conferees working out a compromise catastrophic coverage bill.

"It is estimated that some 37 million Americans have no health insurance. Many in this group are employed, but neither they nor their employers have reasonable access to insurance coverage," he said. He recommended that state risk pools should include self-funded employee benefit plans now prohibited from participation by ERISA.

An increasing percentage of the public and physicians believe that children with AIDS should be allowed to attend regular school classes, according to an AMA opinion survey. Of the 1,500 adults surveyed in February 1988, 67% said that children with AIDS should be allowed to attend class. In the 1987 survey, 57% shared this view. Eighty percent of the 1,000 physicians surveyed this year said children with AIDS should attend classes, compared with 78% in the 1987 survey.

The AMA's plan to establish a new nursing career category, the registered care technologist (RCT) would greatly alleviate the nation's severe nursing shortage, said Dr. Joseph T. Painter, vice chairman of the AMA's board of trustees, in an interview in a July edition of "Modern Maturity," a nationally syndicated TV program produced by the AARP. In June the AMA House of Delegates authorized the establishment of demonstration RCT training programs at various hospitals. The AMA's plan calls for three levels of preparation: assistant, basic and advanced. The RCTs would provide basic bedside care, and free nurses to concentrate on other aspects of nursing.

Sincerely,



Patsy Silver
Managing Editor



“When I realized my chances of becoming disabled by age 65 were *three times greater* than the chances of death . . .

I compared disability insurance plans. And I decided that my MSMA-endorsed disability insurance plan

SERVES ME BEST!

It’s not group insurance, but an individually-owned policy which is *non-cancellable* and *guaranteed renewable*.”

If you’re a member of the Mississippi State Medical Association you may be eligible for this outstanding professional disability plan at *discounted premiums*.

- Non-cancellable, guaranteed renewable
- Medical specialty protection
- Presumptive loss provision
- Indexing of prior earnings
- Waiver of premium
- Cost of living rider
- Future disability insurance option
- Lifetime accident and sickness rider
- Total and residual disability protection

Offered by Paul Revere Insurance Company to MSMA members through its exclusive representatives, Professional Disability Specialists.

Jon B. Wimbish, Disability Specialist

1501 Lakeland Drive, Suite 200 Jackson, MS 39216 Telephone 362-9800



(ciprofloxacin HCl/Miles)



A REVOLUTIONARY ORAL ANTIMICROBIAL WITH THE POWER OF PARENTERALS

- Highly active *in vitro* against a broad range of gram-positive and gram-negative pathogens, including methicillin-resistant *Staphylococcus aureus* and *Pseudomonas aeruginosa**
- For treatment of infections in the:
 - lower respiratory tract[†]
 - urinary tract[†]
 - skin/skin structure[†]
 - bones and joints[†]
- Convenient **B.I.D.** dosage – 250 mg, 500 mg and 750 mg tablets

**In vitro* activity does not necessarily imply a correlation with *in vivo* results.

[†]Due to susceptible strains of indicated pathogens. See indicated organisms in Brief Summary.

CIPRO* SHOULD NOT BE USED IN CHILDREN OR PREGNANT WOMEN.

A history of hypersensitivity to ciprofloxacin is a contraindication to its use. A history of hypersensitivity to other quinolones may also contraindicate the use of ciprofloxacin.



Miles Inc.
Pharmaceutical Division
400 Morgan Lane
West Haven, CT 06516

Please see adjacent page of this advertisement for Brief Summary of Prescribing Information.

Cipro[®] TABLETS (ciprofloxacin HCl/Miles)

■ 500 mg B.I.D. for most infections;
750 mg B.I.D. for severe or complicated infections.

BRIEF SUMMARY CONSULT PACKAGE INSERT FOR FULL PRESCRIBING INFORMATION INDICATIONS AND USAGE

Cipro[®] is indicated for the treatment of infections caused by susceptible strains of the designated microorganisms in the conditions listed below

Lower Respiratory Infections caused by *Escherichia coli*, *Klebsiella pneumoniae*, *Enterobacter cloacae*, *Proteus mirabilis*, *Pseudomonas aeruginosa*, *Haemophilus influenzae*, *Haemophilus parainfluenzae*, and *Streptococcus pneumoniae*.

Skin and Skin Structure Infections caused by *Escherichia coli*, *Klebsiella pneumoniae*, *Enterobacter cloacae*, *Proteus mirabilis*, *Proteus vulgaris*, *Providencia stuartii*, *Morganella morganii*, *Citrobacter freundii*, *Pseudomonas aeruginosa*, *Staphylococcus aureus* (penicillinase and nonpenicillinase-producing strains), *Staphylococcus epidermidis*, and *Streptococcus pyogenes*.

Bone and Joint Infections caused by *Enterobacter cloacae*, *Serratia marcescens*, and *Pseudomonas aeruginosa*.

Urinary Tract Infections caused by *Escherichia coli*, *Klebsiella pneumoniae*, *Enterobacter cloacae*, *Serratia marcescens*, *Proteus mirabilis*, *Providencia rettgeri*, *Morganella morganii*, *Citrobacter diversus*, *Citrobacter freundii*, *Pseudomonas aeruginosa*, *Staphylococcus epidermidis*, and *Streptococcus faecalis*.

Infectious Diarrhea caused by *Escherichia coli* (enterotoxigenic strains), *Campylobacter jejuni*, *Shigella flexneri*, and *Shigella sonnei** when antibacterial therapy is indicated.

*Efficacy for this organism in this organ system was studied in fewer than 10 infections.

Appropriate culture and susceptibility tests should be performed before treatment in order to isolate and identify organisms causing infection and to determine their susceptibility to ciprofloxacin. Therapy with Cipro[®] may be initiated before results of these tests are known, once results become available appropriate therapy should be continued. As with other drugs, some strains of *Pseudomonas aeruginosa* may develop resistance fairly rapidly during treatment with ciprofloxacin. Culture and susceptibility testing performed periodically during therapy will provide information not only on the therapeutic effect of the antimicrobial agent but also on the possible emergence of bacterial resistance.

CONTRAINDICATIONS

A history of hypersensitivity to ciprofloxacin is a contraindication to its use. A history of hypersensitivity to other quinolones may also contraindicate the use of ciprofloxacin.

WARNINGS

CIPROFLOXACIN SHOULD NOT BE USED IN CHILDREN OR PREGNANT WOMEN. The oral administration of ciprofloxacin caused lameness in immature dogs. Histopathological examination of the weight-bearing joints of these dogs revealed permanent lesions of the cartilage. Related drugs such as nalidixic acid, cinoxacin, and norfloxacin also produced erosions of cartilage of weight-bearing joints and other signs of arthropathy in immature animals of various species (SEE ANIMAL PHARMACOLOGY SECTION IN FULL PRESCRIBING INFORMATION).

PRECAUTIONS

General

As with other quinolones, ciprofloxacin may cause central nervous system (CNS) stimulation, which may lead to tremor, restlessness, lightheadedness, confusion, and very rarely to hallucinations or convulsive seizures. Therefore, ciprofloxacin should be used with caution in patients with known or suspected CNS disorders, such as severe cerebral arteriosclerosis or epilepsy, or other factors which predispose to seizures (SEE ADVERSE REACTIONS).

Crystals of ciprofloxacin have been observed rarely in the urine of human subjects but more frequently in the urine of laboratory animals. Crystalluria related to ciprofloxacin has been reported only rarely in man, because human urine is usually acidic. Patients receiving ciprofloxacin should be well hydrated, and alkalinity of the urine should be avoided. The recommended daily dose should not be exceeded. Alteration of the dosage regimen is necessary for patients with impairment of renal function (SEE DOSAGE AND ADMINISTRATION SECTION IN FULL PRESCRIBING INFORMATION).

Drug Interactions

Concurrent administration of ciprofloxacin with theophylline may lead to elevated plasma concentrations of theophylline and prolongation of its elimination half-life. This may result in increased risk of theophylline-related adverse reactions. If concomitant use cannot be avoided, plasma levels of theophylline should be monitored and dosage adjustments made as appropriate.

Antacids containing magnesium hydroxide or aluminum hydroxide may interfere with the absorption of ciprofloxacin, resulting in serum and urine levels lower than desired; concurrent administration of these agents with ciprofloxacin should be avoided.

Probenecid interferes with the renal tubular secretion of ciprofloxacin and produces an increase in the level of ciprofloxacin in the serum. This should be considered if patients are receiving both drugs concomitantly.

As with other broad-spectrum antibiotics, prolonged use of ciprofloxacin may result in overgrowth of nonsusceptible organisms. Repeated evaluation of the patient's condition and microbial susceptibility testing is essential. If superinfection occurs during therapy, appropriate measures should be taken.

Information for Patients

Patients should be advised that ciprofloxacin may be taken with or without meals. The preferred time of dosing is two hours after a meal. Patients should also be advised to drink fluids liberally and not take antacids containing magnesium or aluminum concomitantly or within two hours after dosing. Ciprofloxacin may cause dizziness or lightheadedness, therefore patients should know how they react to this drug before they operate an automobile or machinery or engage in activities requiring mental alertness or coordination.

Carcinogenesis, Mutagenesis, Impairment of Fertility

Eight *in vitro* mutagenicity tests have been conducted with ciprofloxacin and the test results are listed below.

- Salmonella/Microsome Test (Negative)
- E. coli* DNA Repair Assay (Negative)
- Mouse Lymphoma Cell Forward Mutation Assay (Positive)
- Chinese Hamster V₇₉ Cell HGPRT Test (Negative)
- Syrian Hamster Embryo Cell Transformation Assay (Negative)
- Saccharomyces cerevisiae* Point Mutation Assay (Negative)
- Saccharomyces cerevisiae* Mitotic Crossover and Gene Conversion Assay (Negative)
- Rat Hepatocyte DNA Repair Assay (Positive)

Thus, two of the eight tests were positive, but the following three *in vivo* test systems gave negative results:

- Rat Hepatocyte DNA Repair Assay
- Micronucleus Test (Mice)
- Dominant Lethal Test (Mice)

Long-term carcinogenicity studies in animals have not yet been completed.

Pregnancy - Pregnancy Category C

Reproduction studies have been performed in rats and mice at doses up to six times the usual daily human dose and have revealed no evidence of impaired fertility or harm to the fetus due to ciprofloxacin. In rabbits, as with most antimicrobial agents, ciprofloxacin (30 and 100 mg/kg orally) produced gastrointestinal disturbances resulting in maternal weight loss and an increased incidence of abortion. No teratogenicity was observed at either dose. After intravenous administration, at doses up to 20 mg/kg, no maternal toxicity was produced, and no embryotoxicity or teratogenicity was observed. There are, however, no adequate and well-controlled studies in

CONVENIENT B.I.D. DOSAGE

Recommended dosage schedule

Infection Site*	Severity of Infection	Dosage
Respiratory Tract*	Mild/Moderate	500 mg B.I.D.
Bone and Joint*	Severe/Complicated	750 mg B.I.D.
Skin/Skin Structure*	Mild/Moderate	250 mg B.I.D.
	Severe/Complicated	500 mg B.I.D.
Urinary Tract*	Mild/Moderate/Severe	500 mg B.I.D.

pregnant women. SINCE CIPROFLOXACIN, LIKE OTHER DRUGS IN ITS CLASS, CAUSES ARTHROPATHY IN IMMATURE ANIMALS, IT SHOULD NOT BE USED IN PREGNANT WOMEN (SEE WARNINGS).

Nursing Mothers

It is not known whether ciprofloxacin is excreted in human milk, however, it is known that ciprofloxacin is excreted in the milk of lactating rats and that other drugs of this class are excreted in human milk. Because of this, and because of the potential for serious adverse reactions from ciprofloxacin in nursing infants, a decision should be made to discontinue nursing or to discontinue the drug, taking into account the importance of the drug to the mother.

Pediatric Use

Ciprofloxacin should not be used in children because it causes arthropathy in immature animals (SEE WARNINGS).

ADVERSE REACTIONS

Ciprofloxacin is generally well tolerated. During clinical investigation, 2,799 patients received 2,868 courses of the drug. Adverse events that were considered likely to be drug related occurred in 7.3% of courses, possibly related in 9.2%, and remotely related in 3.0%. Ciprofloxacin was discontinued because of an adverse event in 3.5% of courses, primarily involving the gastrointestinal system (1.5%), skin (0.6%), and central nervous system (0.4%).

The most frequently reported events, drug related or not, were nausea (5.2%), diarrhea (2.3%), vomiting (2.0%), abdominal pain/discomfort (1.7%), headache (1.2%), restlessness (1.1%), and rash (1.1%).

Additional events that occurred in less than 1% of ciprofloxacin courses are listed below. Those typical of quinolones are italicized.

GASTROINTESTINAL (See above), painful oral mucosa, oral candidiasis, dysphagia, intestinal perforation, gastrointestinal bleeding.

CENTRAL NERVOUS SYSTEM (See above), dizziness, lightheadedness, insomnia, nightmares, hallucinations, manic reaction, irritability, tremor, ataxia, convulsive seizures, lethargy, drowsiness, weakness, malaise, anorexia, phobia, depersonalization, depression, paresthesia.

SKIN/HYPERSENSITIVITY (See above), pruritus, urticaria, photosensitivity, flushing, fever, chills, angioedema, edema of the face, neck, lips, conjunctivae or hands, cutaneous candidiasis, hyperpigmentation, erythema nodosum.

SPECIAL SENSES blurred vision, disturbed vision, (change in color perception, overbrightness of lights), decreased visual acuity, diplopia, eye pain, tinnitus, bad taste.

MUSCULOSKELETAL joint or back pain, joint stiffness, achiness, neck or chest pain, flare-up of gout.

RENAL/UROGENITAL interstitial nephritis, renal failure, polyuria, urinary retention, urethral bleeding, vaginitis, acidosis.

CARDIOVASCULAR palpitations, atrial flutter, ventricular ectopy, syncope, hypertension, angina pectoris, myocardial infarction, cardiopulmonary arrest, cerebral thrombosis.

RESPIRATORY epistaxis, laryngeal or pulmonary edema, hiccough, hemoptysis, dyspnea, bronchospasm, pulmonary embolism.

Most of these events were described as only mild or moderate in severity, abated soon after the drug was discontinued, and required no treatment.

In several instances, nausea, vomiting, tremor, restlessness, agitation, or palpitations were judged by investigators to be related to elevated plasma levels of theophylline possibly as a result of a drug interaction with ciprofloxacin.

Adverse Laboratory Changes Changes in laboratory parameters listed as adverse events without regard to drug relationship.

Hepatic - Elevations of ALT (SGPT) (1.9%), AST (SGOT) (1.7%), alkaline phosphatase (0.8%), LDH (0.4%), serum bilirubin (0.3%).

Hematologic - eosinophilia (0.6%), leukopenia (0.4%), decreased blood platelets (0.1%), elevated blood platelets (0.1%), pancytopenia (0.1%).

Renal - Elevations of Serum creatinine (1.1%), BUN (0.9%).

CRYSTALLURIA, CYLINORURIA, AND HEMATURIA HAVE BEEN REPORTED.

Other changes occurring in less than 0.1% of courses were: Elevation of serum gamma-glutamyl transferase, elevation of serum amylase, reduction in blood glucose, elevated uric acid, decrease in hemoglobin, anemia, bleeding diathesis, increase in blood monocytes, and leukocytosis.

OVERDOSSAGE

Information on overdosage in humans is not available. In the event of acute overdosage, the stomach should be emptied by inducing vomiting or by gastric lavage. The patient should be carefully observed and given supportive treatment. Adequate hydration must be maintained. In the event of serious toxic reactions from overdosage, hemodialysis or peritoneal dialysis may aid in the removal of ciprofloxacin from the body, particularly if renal function is compromised.

DOSAGE AND ADMINISTRATION

The usual adult dosage for patients with urinary tract infections is 250 mg every 12 hours. For patients with complicated infections caused by organisms not highly susceptible, 500 mg may be administered every 12 hours.

Respiratory tract infections, skin and skin structure infections, and bone and joint infections may be treated with 500 mg every 12 hours. For more severe or complicated infections, a dosage of 750 mg may be given every 12 hours.

The recommended dosage for infectious diarrhea is 500 mg every 12 hours.

In patients with renal impairment, some modification of dosage is recommended (SEE DOSAGE AND ADMINISTRATION SECTION IN FULL PRESCRIBING INFORMATION).

HOW SUPPLIED

Cipro[®] (ciprofloxacin HCl/Miles) is available as tablets of 250 mg, 500 mg, and 750 mg in bottles of 50, and in Unit-Dose packages of 100 (SEE FULL PRESCRIBING INFORMATION FOR COMPLETE INFORMATION).

* Due to susceptible strains of indicated pathogens. See indicated organisms in Brief Summary.

For further information, contact the Miles Information Service:
1-800-642-4776. In VA, call collect: 703-391-7888.

COMMITTED TO THERAPEUTIC EFFICIENCY



Miles Inc.
Pharmaceutical Division
400 Morgan Lane
West Haven, CT 06516

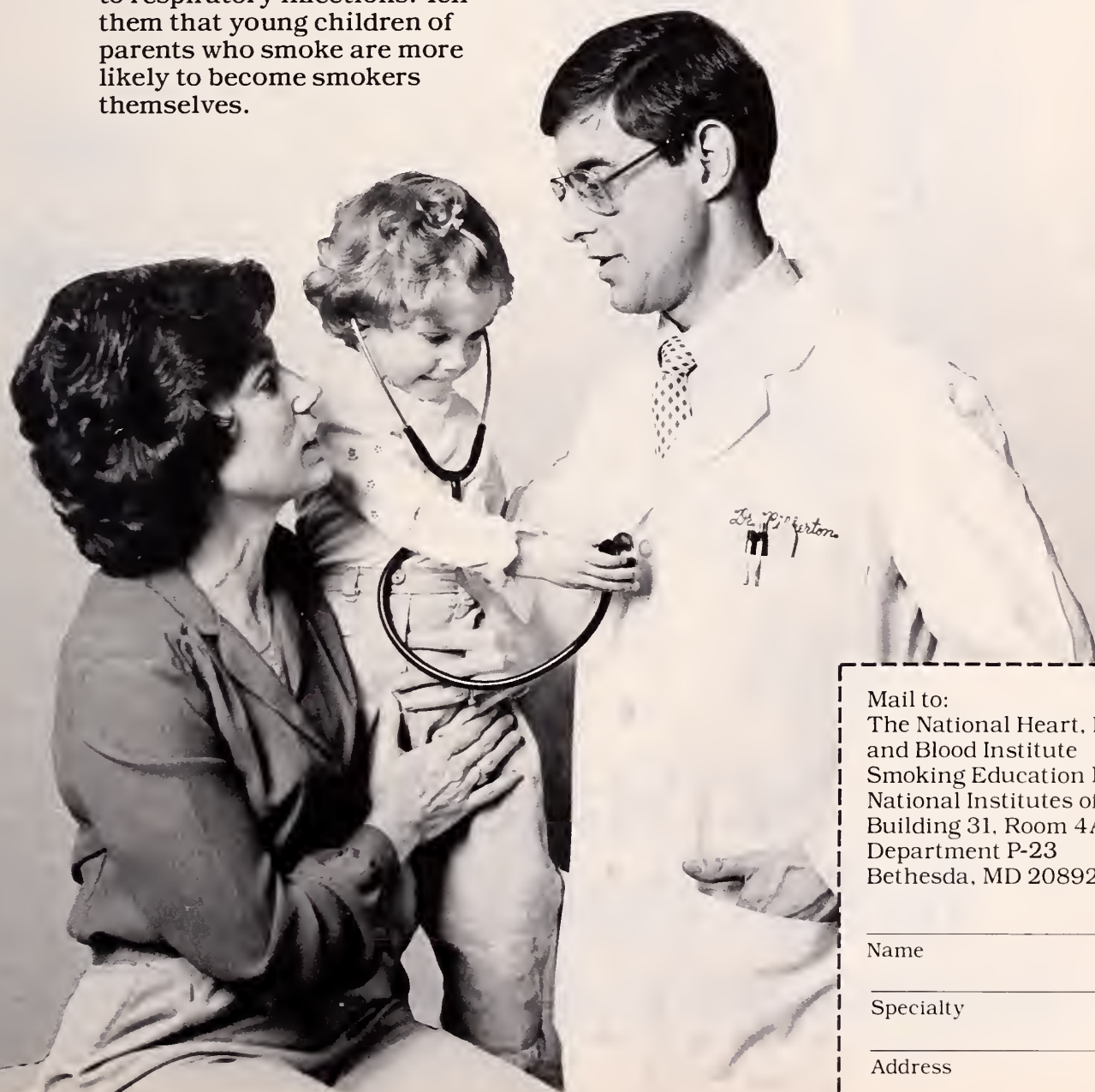
A Clinical Opportunity for Smoking Intervention

You can play a special role in reaching smokers. Encouraging parents not to smoke can improve the health of the entire family.

Take a few minutes to explain that children of parents who smoke are often more prone to respiratory infections. Tell them that young children of parents who smoke are more likely to become smokers themselves.

The minutes you spend can make a difference now, and in the years ahead.

For a free copy of *Clinical Opportunities for Smoking Intervention: A Guide for the Busy Physician*, complete the form below.



Mail to:
The National Heart, Lung,
and Blood Institute
Smoking Education Program
National Institutes of Health
Building 31, Room 4A 18
Department P-23
Bethesda, MD 20892



Name _____

Specialty _____

Address _____

City _____



Edouard C. (Ed) Carrere, Jr. attended St. Stanislaus from 1934-1939. He went on to become a partner in Ernest A. Carrere's Sons in New Orleans and has served on the Board of Directors of the American Red Cross, the Presidents Council of Loyola University, and as President of the Real Estate Commission of New Orleans.



"The virtues of honesty and integrity instilled in me at St. Stanislaus were the trademark of my business. My word is my bond."

To the Brothers of the Sacred Heart, every student is a potential leader. And giving him the proper example—spiritual, intellectual and moral—is our mission at St. Stanislaus.

BOARDING SCHOOL GRADES 6-12
SUMMER CAMP AGES 9-14
 304 South Beach Blvd. Bay St. Louis, MS 39520
SAINT STANISLAUS

St. Stanislaus helps build leaders.

FOR A FREE BROCHURE CALL THE DIRECTOR OF ADMISSIONS—(601) 467-9057.

DATELINE

Licensure Linked with
Office Lab Standards

Washington, DC - Physicians' medical licenses could be revoked for failure to meet certain standards for in-office labs, under draft guidelines issued by HHS. The proposed regulations were discussed in House subcommittee hearings last month. The guidelines also called for physicians to be excluded from participation in Medicare and to forfeit the right to a defense in malpractice suits involving lab testing.

Data Supportive of Alcohol-
Breast Cancer Association

Chicago, IL - An analysis of more than a dozen studies is "strongly supportive" of an association between moderate alcohol consumption and increased breast cancer risk, a report in the August 5 JAMA finds. The authors caution that they do not interpret their findings as necessarily being proof of a cause-and-effect relationship between drinking and breast cancer.

Technology vs. Cost
Is Conference Topic

Chicago, IL - The AMA and the Health Policy Agenda for the American People will present a workshop, "Innovation Imperiled: Medical Technology in an Era of Cost Containment," in Chicago, October 27-28. The conference will examine the future of diagnostics in the areas of imaging, immunodiagnosics and DNA probes. Developments in treatment of cancer, AIDS and other diseases will be discussed in light of cost-containment measures.

Leukemia Society Accepting
Grant Applications

New York, NY - The Leukemia Society of America is accepting applications for 1989 grants in basic science and clinical level research of leukemia and related diseases. Deadline for applications is September 1. Funding for all grantees begins July 1, 1989. For application forms and additional information, write to: Research Grant Coordinator, Leukemia Society of America, 733 Third Avenue, New York, NY 10017.

Detecting Psychiatric
Problems in Youngsters

Chicago, IL - Pediatricians tend to underreport both minor and serious psychiatric problems in the children and adolescents they see, concludes a report in the July issue of American Journal of Diseases of Children. The study compared reports by 35 physicians on psychiatric problems in 85 patients aged 6 to 17 with reports from three other sources, and found "poor agreement" in the assessments.

Introducing a new company with an array of services for physicians.

Perhaps you are thinking of adding to your practice and would like:

- A physician to help with the patient load,
- An affiliate in your facility to share costs, or
- A partner until you are ready to retire.

Perhaps you are considering selling your practice and need:

- An assessment of your practice for the purpose of marketing,
- An appraisal of the furnishings, accounts receivables, and good will,
- An individual to act as your agent.

Perhaps you are wondering about the current condition of your practice and need:

- Consultation on accounts receivables,
- Consultation on billing and collections, or
- Help with staff training.

Perhaps you are planning to start a practice and need help:

- Setting it up,
- Acquiring furniture, equipment and supplies,
- Selecting and training your staff.



Frank Cochran

Perhaps you are considering purchasing an existing practice and need:

- Someone with experience to consult with in the process, or
- Someone to act as your agent.

After 11 years of providing the above services for physicians in West Central Alabama, I have decided to serve all physicians in this capacity. I am available and can assist you with these and many other services related to practice management. For more information, please contact me at 205-556-8457.

QUALITY HEALTH RESOURCES

Post Office Box 6002 • Tuscaloosa, Alabama 35405 • (205) 556-8457
A Christian Organization — Operated on Christian principles.



ROSALYN P. STERLING-SCOTT, M.D.

Assistant Professor of Surgery, UCLA School of Medicine and Drew University of Medicine and Science, Los Angeles

Associate Surgeon, Department of Cardiovascular & Thoracic Surgery, Centinela Hospital Medical Center, Los Angeles

Major, U.S. Army Reserve

EDUCATION Rensselaer Polytechnic Institute, Troy, NY, B.S. Chemistry; NYU School of Medicine, New York, M.D.

RESIDENCY Boston University School of Medicine (Cardiovascular); Saint Vincent's and St. Claire's Hospitals, New York City (General Surgery)

FELLOWSHIP First Mary A. Fraley Cardiovascular Surgical Research Fellow at the Texas Heart Institute, Houston

OUTSTANDING ACHIEVEMENTS Author of numerous articles, including "Indications for Early Bypass Grafting Following Intracoronary Streptokinase"; author of "The Female Surgeon—Dawn of a New Era," chapter in *A Century of Black Surgeons—The U.S.A. Experience*; Board of Directors, Association of Black Cardiologists; Secretary, Drew Society

“The caliber of physicians you meet in the Army Reserve exposes you to new ways of looking at a problem. It's easy for young surgeons to become entrenched in one method, but in the Army Reserve you'll have the chance to work with outstanding physicians in your own specialty, and often learn new ideas that will help you to improve your own approach to clinical or research problems,” says Dr. Sterling-Scott.

The Army Reserve can offer physicians a variety of challenging options such as teaching, research, unique training programs, and the opportunity to practice in prestigious Army medical centers.

“Joining the Army Reserve enabled me to take advantage of a number of conferences, including one at Walter Reed, where I worked with thoracic surgical colleagues, while conducting my own research project.”

We understand the time demands on a busy physician. So the Army Reserve offers training programs that will allow you to be flexible about the time you serve.

For more information about specific programs, call toll-free 1-800-USA-ARMY.

**ARMY RESERVE MEDICINE.
BE ALL YOU CAN BE.**



A NEW H₂ Antagonist

AXID[®] 300mg

nizatidine

Effective once-nightly
duodenal ulcer therapy available in a
Unique Convenience Pak
for better patient compliance



AXID[®] nizatidine capsules

Brief Summary. Consult the package insert for prescribing information.

Indications and Usage: Axid is indicated for up to eight weeks for the treatment of active duodenal ulcer. In most patients, the ulcer will heal within four weeks.

Axid is indicated for maintenance therapy for duodenal ulcer patients, at a reduced dosage of 150 mg h.s. after healing of an active duodenal ulcer. The consequences of continuous therapy with Axid for longer than one year are not known.

Contraindication: Axid is contraindicated in patients with known hypersensitivity to the drug and should be used with caution in patients with hypersensitivity to other H₂-receptor antagonists.

Precautions: General—1. Symptomatic response to nizatidine therapy does not preclude the presence of gastric malignancy.
2. Because nizatidine is excreted primarily by the kidney, dosage should be reduced in patients with moderate to severe renal insufficiency.

3. Pharmacokinetic studies in patients with hepatorenal syndrome have not been done. Part of the dose of nizatidine is metabolized in the liver. In patients with normal renal function and uncomplicated hepatic dysfunction, the disposition of nizatidine is similar to that in normal subjects.

Laboratory Tests: False-positive tests for urobilinogen with Multistix[®] may occur during therapy with nizatidine.

Drug Interactions:—No interactions have been observed between Axid and theophylline, chlorazepate, lorazepam, lidocaine, phenytoin, and warfarin. Axid does not inhibit the cytochrome P-450-linked drug-metabolizing enzyme system, therefore, drug interactions mediated by inhibition of hepatic metabolism are not expected to occur. In patients given very high doses (3,900 mg) of aspirin daily, increases in serum salicylate levels were seen when nizatidine, 150 mg b.i.d., was administered concurrently.

Carcinogenesis, Mutagenesis, Impairment of Fertility:—A two-year oral carcinogenicity study in rats with doses as high as 500 mg/kg/day (about 80 times the recommended daily therapeutic dose) showed no evidence of a carcinogenic effect. There was a dose-related increase in the density of enterochromaffin-like (ECL) cells in the gastric oxyntic mucosa. In a two-year study in mice, there was no evidence of a carcinogenic effect in male mice, although hyperplastic nodules of the liver were increased in the high dose males compared to placebo. Female mice given the high dose of Axid (2,000 mg/kg/day, about 330 times the human dose) showed marginally statistically significant increases in hepatic carcinoma and hepatic nodular hyperplasia with no numerical increase seen in any of the other dose groups. The rate of hepatic carcinoma in the high dose animals was within the historical control limits seen for the strain of mice used. The female mice were given a dose larger than the maximum tolerated dose, as indicated by excessive (30%) weight decrement

compared to concurrent controls, and evidence of mild liver injury (transaminase elevations). The occurrence of a marginal finding at high dose only in animals given an excessive, and somewhat hepatotoxic dose, with no evidence of a carcinogenic effect in rats, male mice, and female mice (given up to 360 mg/kg/day, about 60 times the human dose), and a negative mutagenicity battery is not considered evidence of a carcinogenic potential for Axid.

Axid was not mutagenic in a battery of tests performed to evaluate its potential genetic toxicity, including bacterial mutation tests, unscheduled DNA synthesis, sister chromatid exchange, and the mouse lymphoma assay.

In a two-generation, prenatal and postnatal, fertility study in rats, doses of nizatidine up to 650 mg/kg/day produced no adverse effects on the reproductive performance of parental animals or their progeny.

Pregnancy—Fetotoxic Effects—Pregnancy Category C—Oral reproduction studies in rats at doses up to 300 times the human dose, and in Dutch Belted rabbits at doses up to 55 times the human dose, revealed no evidence of impaired fertility or fetotoxic effect, but, at a dose equivalent to 300 times the human dose, treated rabbits had abortions, decreased number of live fetuses, and depressed fetal weights. On intravenous administration to pregnant New Zealand White rabbits, nizatidine at 20 mg/kg produced cardiac enlargement, coarctation of the aortic arch, and cutaneous edema in one fetus and at 50 mg/kg it produced ventricular anomaly, distended abdomen, spina bifida, hydrocephaly, and enlarged heart in one fetus. There are, however, no adequate and well-controlled studies in pregnant women. It is also not known whether nizatidine can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Nizatidine should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers:—Nizatidine is secreted and concentrated in the milk of lactating rats. Pups reared by treated lactating rats had depressed growth rates. Although no studies have been conducted in lactating women, nizatidine is assumed to be secreted in human milk, and caution should be exercised when nizatidine is administered to nursing mothers.

Pediatric Use:—Safety and effectiveness in children have not been established.
Use in Elderly Patients:—Ulcer healing rates in elderly patients are similar to those in younger age groups. The incidence rates of adverse events and laboratory test abnormalities are also similar to those seen in other age groups. Age alone may not be an important factor in the disposition of nizatidine. Elderly patients may have reduced renal function.

Adverse Reactions: Clinical trials of nizatidine included almost 5,000 patients given nizatidine in studies of varying durations. Domestic placebo-controlled trials included over 1,900 patients given nizatidine and over 1,300 given placebo. Among the more common adverse events in the domestic placebo-controlled trials, sweating (1% vs 0.2%), urticaria (0.5% vs <0.01%), and somnolence (2.4% vs 1.3%) were significantly more common in the nizatidine group. A variety of less common events was also reported, it was not possible to

determine whether these were caused by nizatidine.

Hepatic—Hepatocellular injury, evidenced by elevated liver enzyme tests (SGOT [AST], SGPT [ALT], or alkaline phosphatase), occurred in some patients possibly or probably related to nizatidine. In some cases, there was marked elevation of SGOT, SGPT enzymes (greater than 500 IU/L), and in a single instance, SGPT was greater than 2,000 IU/L. The overall rate of occurrences of elevated liver enzymes and elevations to three times the upper limit of normal, however, did not significantly differ from the rate of liver enzyme abnormalities in placebo-treated patients. All abnormalities were reversible after discontinuation of Axid.

Cardiovascular:—In clinical pharmacology studies, short episodes of asymptomatic ventricular tachycardia occurred in two individuals administered Axid and in three untreated subjects.

Endocrine:—Clinical pharmacology studies and controlled clinical trials showed no evidence of antiandrogenic activity due to Axid. Impotence and decreased libido were reported with equal frequency by patients who received Axid and by those given placebo. Rare reports of gynecomastia occurred.

Hematologic:—Fatal thrombocytopenia was reported in a patient who was treated with Axid and another H₂-receptor antagonist. On previous occasions, this patient had experienced thrombocytopenia while taking other drugs.

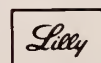
Integumentary:—Sweating and urticaria were reported significantly more frequently in nizatidine than in placebo patients. Rash and exfoliative dermatitis were also reported.

Other:—Hyperuricemia unassociated with gout or nephrolithiasis was reported.

Overdosage: There is little clinical experience with overdosage of Axid in humans. If overdosage occurs, use of activated charcoal, emesis, or lavage should be considered along with clinical monitoring and supportive therapy. Renal dialysis for four to six hours increased plasma clearance by approximately 84%.

Test animals that received large doses of nizatidine have exhibited cholinergic-type effects, including lacrimation, salivation, emesis, miosis, and diarrhea. Single oral doses of 800 mg/kg in dogs and of 1,200 mg/kg in monkeys were not lethal. Intravenous LD₅₀ values in the rat and mouse were 301 mg/kg and 232 mg/kg respectively. PV 2091 AMP [041288]

Axid[®] (nizatidine, Lilly)



Eli Lilly and Company
Indianapolis, Indiana
46285

NZ-2903-B-849356

© 1988, ELI LILLY AND COMPANY

Axid[®] (nizatidine, Lilly)

Who would say something nice about a bill collector?

Over 1,200 professional and trade associations, including yours.

It's true. The bill collecting services of I.C. System have been endorsed by over 1,200 associations around the country, including the one you belong to.

We're proud of these endorsements. We've made a concerted effort to bring high standards of professionalism, ethics, and effectiveness to the collection process. We believe we've succeeded and, apparently, your association agrees.

So if you've been billing people who aren't paying you, now you know who to contact.

Although we're headquartered in St. Paul, Minnesota, we have communication centers in every state of the union. We'll assign a local I.C. representative to your account who will be supported by a full range of collection services and

personnel, including carefully-trained telephone contact specialists. We'll even provide initial training on how to use our service for the person(s) in your office handling accounts receivable.

But most important, we *guarantee* results. Our fee structure combines a very competitive commission rate with a retainer (corporate or standard) scaled to your needs. And we guarantee to keep collecting for as long as it takes to recover *at least ten times the amount of that retainer*.

To find out how the I.C. System approach can work for you, call toll free (800) 824-9469, ext. 330. In Minnesota, call (612) 483-8201, ext. 330. Or return the coupon.



I want to recover the money that's owed me. Please provide me with information on the I.C. System approach.

Name _____

Title _____

Firm _____

Address _____

City _____ State _____ Zip _____

Telephone number _____

Mail to: I.C. System, Inc., 444 East Highway 96, P.O. Box 64639, St. Paul, Minnesota 55164-0639

3386

**You're
a Professional.**

**You need Professional
Health Insurance
Coverage.**

MSMA

Benefit Plan and Trust

MSMA Benefit Plan and Trust is a superior insurance program which fulfills the quality of coverage and affordability that everyone wants.

Sponsored by the Mississippi State Medical Association, the MSMA Benefit Plan and Trust offers life and health benefits to physician members of MSMA, their employees and families.

- \$1,000,000 lifetime benefits.
- Life Coverage up to \$50,000.
- Broad benefits with fair and equitable rates.
- Management by and for physicians.
- Non-profit and administered at lowest possible cost.

For Complete Description of Benefits Write:

MSMA Benefit Plan and Trust

P.O. Box 55509
Jackson, MS 39216

ORIGINAL PAPERS

Late Left Ventricular Function Following Angioplasty in Acute Myocardial Infarction

THAD F. WAITES, M.D.

EDWARD GENTON, M.D.

THE THERAPY of acute myocardial infarction (MI) is changing dramatically and is now directed toward preserving myocardium. Following MI, a major determinant of outcome, both short- and long-term, is the extent of resultant left ventricular dysfunction. Essentially all MI is caused, in the final step, by thrombus occluding a stenotic portion of coronary artery. Myocardial salvage can be accomplished by lysing, compressing, or bypassing this occluding thrombus. The degree of success is related to the rapidity of reperfusion and probably to the degree to which normal blood flow is restored.

Several studies of lytic therapy have now documented significant benefit on mortality.^{1,2} Reports regarding primary therapy with percutaneous transluminal coronary angioplasty (PTCA) also demonstrate this.⁸ This benefit is directly proportional to the time from onset of symptoms to restoration of flow. But proof of benefit in reducing the size of the infarction has been difficult to show. By the usual clinical measures of size of an infarction, i.e., CPK, presence and area of the Q-wave, and early LV ejection fraction, benefit cannot be shown.

In this review we will present information on myocardial function from a group of patients treated with PTCA during the first two hours of an MI and

tested one year later. We will use this as a springboard to discuss and review aggressive early treatment with PTCA, thrombolysis, or both.

Methods

Sixteen patients underwent PTCA in the early phase of myocardial infarction. Outcome from the acute phase was evaluated. To assess chronic outcome, patients underwent assessment of left ventricular function at the end of one year to measure global and regional myocardial infarction. Patients chosen arrived in the emergency room within two hours after onset of symptoms of myocardial infarction and with associated ST segment change. Their therapy consisted of the usual measures for pain relief and arrhythmia control. Streptokinase was administered to several. They were all taken immediately to the catheterization laboratory where occlusion of a coronary artery was documented and angioplasty was accomplished. Subsequent therapy was conventional. After approximately one year, gated nuclear function study was carried out with rest and exercise.

Results

The results are shown in Table 1. Sixteen patients were studied; the average age was 57.93. There were 12 males and 4 females. The average time to reperfusion was 2.9 hours, with a range of 1.75-4 hours. Both the EKG's and the CPK's showed findings of infarction (though the CPK did tend to peak

Dr. Waites is a cardiologist with South Mississippi Heart Institute, Hattiesburg, MS.

Dr. Genton is a cardiologist with Ochsner Clinic, New Orleans, LA.

earlier than is usually seen). The CPK ranged from 52 to 4800, with an average of 1873.

After one year, there was wall motion in the region of the infarction in 15 of the 16 patients. The wall motion was normal in 11. The average left ventricular ejection fraction was 54.87 with a range of 42 to 68. The overall functional classification was excellent; 14 patients were functional class 1. No deaths occurred either at the time of infarction or in the followup time.

Discussion

A major factor determining survival and prognosis from an infarction is survival of the myocardium involved. Both rapid restoration of blood flow and adequate sustained blood flow are necessary for this survival to occur. The ultimate size of the infarction clearly correlates with the presence of arrhythmia, the problems of congestive or low-output cardiac syndromes, and early and later mortality. Natural factors can preserve myocardium; these include adequate collateral flow and spontaneous thrombolysis.³ Also, conventional treatment can be associated with improved function.⁴ While there is a heterogenous result,⁵ some studies as well as clinical experience show that most infarcting myocardium is permanently akinetic or severely hypokinetic after a completed myocardial infarction.³

Our study, and several others, demonstrate that this muscle can be salvaged if blood flow can be restored quickly enough. In these patients, this was accomplished with early PTCA, performed either alone or in conjunction with streptokinase.

Most emphasis until now has been focused on

removal of thrombus by thrombolytic agents. The thrombolytic agents that are now available are streptokinase, urokinase, and tissue plasminogen activator (T-PA). Streptokinase and urokinase have been available for years. Lately, studies have demonstrated that these agents are effective in infarction.^{1,2} As a result, these are available for clinical use in myocardial infarction.

Also, T-PA is now clinically available. This enzyme is relatively clot specific and works best in the presence of fibrin. It has less effect than streptokinase on systemic fibrinogen and as a result releases fewer fibrinogen degradation products into the blood. Thus, hemorrhagic complications are fewer than with streptokinase, though certainly still present.

T-PA has been compared directly to streptokinase in the TIMI trial and has been demonstrated to have superior results with fewer complications.⁶ It will still lyse thrombi hours into an infarct with about the same efficacy as earlier, but of course with less clinical benefit.

Though all the thrombolytic agents can be given by intra-coronary route, the standard is now for intravenous therapy. Streptokinase is usually given as a 1.5 million unit infusion given over a 30-45 minute time period. A treatment protocol for T-PA is shown in Table 2.

The indications and contraindications for all the thrombolytic agents are about the same. These are listed in Table 3.

Other factors may also adversely influence the clinical outcome including the following: recent major surgery, cerebrovascular disease, recent gas-

TABLE 1

Age	Sex	Infarct Artery	Hours Occluded	Stenosis After	Peak CPK	Ejection Fraction	Wall Motion
73	f	circ-marg	2	40	2557	58	normal
51	f	lad	2.5	20	1450	68	normal
66	f	lad	2	20	1200	53	mild hypokinesis, post-op
71	f	lad	2.75	30	4800	49	mild hypokinesis
51	m	lad	3	20	52	66	normal
57	m	rca	4.5	60	779	58	normal
40	m	rca	4	75	1310	56	normal
64	m	rca	4	50	2475	58	normal
74	m	lad	3	40	1520	42	akinetic
51	m	lad	2	30	2604	42	hypokinetic
49	m	lad	4	30	1120	58	normal
74	m	rca	3	40	2570	50	normal
58	m	circ	1.75	20	3720	55	normal
61	m	rca	3	20	1270	64	normal
34	m	rca	2	99	1000	47	mild hypokinesis
53	m	rca	3	40	1548	54	normal

trointestinal or genitourinary bleeding, high likelihood of left heart thrombus, acute pericarditis, hemostatic defects, significant liver dysfunction, pregnancy, diabetic hemorrhagic retinopathy, advanced age, patients currently receiving oral anticoagulants, and any other condition in which bleeding represents a significant hazard.

Thrombolytic therapy alone can restore coronary flow. But this therapy usually leaves significant residual stenosis. Also it fails to open the infarct related artery in 20% or more of cases. In this interim, the involved myocardium is subjected to subnormal perfusion and perhaps to continued injury from ischemia, possibly increasing the presence and extent of myocardial necrosis. The re-infarction rate is about 15%.⁷ Consequently with thrombolysis, either the myocardium is not salvaged or recurrent ischemic episodes are frequent. As a result of this high rate of double jeopardy of recurrent ischemia or re-infarction, catheterization needs to be done soon after thrombolytic therapy. Then definitive therapy needs to be initiated pending the results.

PTCA has been used in conjunction with and sometimes in place of thrombolytic agents. It can be done with relative safety during a myocardial infarction. This procedure can provide rapid restoration of blood flow as well as sustained blood flow. It offers several advantages including lesser time to reperfusion, more adequate reperfusion, decreased frequency of late ischemic episodes, and the avoidance of a thrombolytic state with potential for post-procedure hemorrhage.⁸ Of importance, it is probably the best therapy for cardiogenic shock caused by myocardial infarction. But, there are potential problems. The main one is logistics, but also there is potentially a higher complication rate if the PTCA is done during an infarction rather than at some later time.

The timing of PTCA to thrombolysis is under critical review and study at this time. Certainly, if PTCA can be delayed for hours with equal or better results as compared to immediate PTCA, this therapy will be available to even more patients. With this strategy, the thrombolytic therapy can be started immediately in any hospital and the patient moved to a cath lab at a reasonable time. Results from one trial, the TAMI trial, and reports from other centers show that this is acceptable strategy.⁹

Conclusion

The therapy of myocardial infarction can now have a major impact on prognosis. In the past, we could, at most, treat arrhythmias and attempt to support the infarcting myocardium. Now, with the

TABLE 2

1. Obtain EKG before and after sub-lingual nitroglycerin or nifedipine to document STT changes and unmask coronary spasm.
2. Insert 2 large bore IV, one for fluid administration and blood sampling and the other for TPA infusion. Avoid subclavian or jugular venipunctures.
3. Labs: CBC, PT, PTT, FIBRINOGEN, type and screen, CPK AND CPKMB.
4. Heparin 5000u bolus then infusion to maintain PTT 1.5 times control.
5. Lidocaine bolus and constant infusion.
6. T-PA administered as follows:
10 mg bolus, then
50 mg IV over first hour, then
20 mg/hr IV after subsequent 2 hrs for a total dose of 100 mg.
7. Monitor EKG lead showing the largest ST segment elevation.
8. Obtain EKG initially, following the infusion, and Q 4 hr. times 2.
9. Obtain CPK and MB fraction 1 hr. after completion of infusion and at four hour intervals for the next 24 hrs.
10. Obtain cardiac catheterization within the next 48 hrs. Maintain heparin infusion up to the time of the catheterization.

TABLE 3

1. Active internal bleeding.
2. History of cerebrovascular accident.
3. Recent intracranial or intraspinal surgery or trauma.
4. Intracranial neoplasm, arteriovenous malformation, or aneurysm.
5. Known bleeding diathesis.
6. Severe uncontrolled hypertension.

thrombolytic agents and with PTCA, this myocardium can be reperfused.

Our study, using PTCA as the primary mode of therapy, shows that myocardial function can be preserved. Other studies with thrombolysis and with PTCA show that mortality can be improved.

The strategy for management of the acute myocardial infarction is now being completely re-evaluated. Beginning with the emergency medical technician in the ambulance and including the emergency room and CCU personnel, the emphasis should be on quick evaluation, treatment, and triage into therapy that can result in reperfusion of the infarcting myocardium. As is demonstrated in our study, and as is now generally accepted, early reperfusion potentially saves heart muscle and thus saves lives.

★★★

Dr. Waites: 415 South 28th Avenue (39401)

Acknowledgement

We would like to thank the staff cardiologists and fellows of the Ochsner Clinic. All of these patients were managed as a joint effort of this excellent group.

Bibliography

1. Gruppo Italiano per lo Studio della Streptochinasi Nell'Infarto Miocardico (GISSI). Effectiveness of intravenous thrombolytic treatment in acute myocardial infarction. *Lancet* 1:397, 1986.
2. Kennedy JW, Ritchie JL, Davis KB, et al. The Western Washington randomized trial of intracoronary streptokinase in acute myocardial infarction: a 12-month follow-up report. *N Engl J Med* 312:1073-8, 1985.
3. Borer JS, Rosing DR, Miller RH, et al. Natural History of Left Ventricular Function During 1 Year after Acute Myocardial Infarction. *American Journal of Cardiology* 46:1-12, July, 1980.
4. Schelbert HR, Henning H, Ashburn WL, et al. Serial measurements of left ventricular ejection fraction by radio nuclear angiogram early and late after myocardial infarction. *American Journal of Cardiology* 38:#4, 407, Oct, 1976.
5. Weintraub WS, Helphand RH. Heterogeneous fate of the left ventricle after acute myocardial infarction. *Journal Am Col Card* 8 #4:986-90, October, 1986.
6. The TIMI Study Group. The thrombolysis in myocardial infarction (TIMI) trial: Phase I findings. *N Engl J Med* 312:932-6, 1985.
7. Guerci AD, Gerstenblith G, Brinker JA. A randomized trial of intravenous tissue plasminogen activator for acute myocardial infarction with subsequent randomization to elective coronary angioplasty. *N Engl J Med* 317:1613-8, Dec 24, 1987.
8. Hartzler GO, Rutherford BD, McConahay DR. Percutaneous transluminal coronary angioplasty: application for acute myocardial infarction. *Am J Cardiol* 53:117c-21c, June 15, 1984.
9. Topol EJ, Califf RM, George BS, et al. A randomized trial of immediate versus delayed elective angioplasty after intravenous tissue plasminogen activator in acute myocardial infarction. *N Engl J Med* 317:581-8, 1987.

PHYSICIANS, THERE ARE TWO KINDS OF FLEXIBILITY IN THE ARMY RESERVE WE THINK YOU'LL LIKE.

One, time. We know how tough it is for a busy physician to make weekend time commitments. So we offer flexible training programs that allow a physician to share some time with his or her country. We arrange a schedule to suit your requirements.

Two, the opportunity to explore other phases of medicine, to add a different kind of knowledge—the challenge of military health care. It's a flexibility which could prove to be both stimulating and rewarding, with the opportunity to participate in a variety of programs that can put you in contact with medical leaders from all over the country.

See how flexible we can be, call our Army Medical Personnel Counselor:

MAJ MEL VAN DYKE
(504) 522-1977/1978

BE ALL YOU CAN BE.
ARMY RESERVE.

Desmoid Tumors: Report of a Case Responsive to Antiestrogen and Review of the Literature

LODOVICO BALDUCCI, M.D.

DIANA D. LITTLE, R.N.

ROBERT SPENCER, M.D.

TAWFIQ KHANSUR, M.D.

Jackson, Mississippi

DESMOID TUMORS are rare neoplasms of the connective tissue. Characteristic of these tumors is aggressive local growth which may lead to end organ failure by invasion and compression of adjacent anatomic structures, while distant metastases are absent.¹⁻³

In the majority of cases, desmoid tumors are not completely resectable. Different treatment modalities such as radiation therapy, chemotherapy, and hormonal manipulations have produced regression of residual disease and allowed prolonged patient survival in some occasions.⁴⁻⁹

We report the case of a patient with desmoid tumor of the mesentery, which responded to the antiestrogen tamoxifen. We will use this case to illustrate the clinical behavior and the management of desmoid tumors.

Case Report

A 50-year-old man was admitted to the Jackson VA Medical Center (JVAMC) on March 5, 1985, for evaluation of an abdominal mass, which had been present and slowly growing for 3 months. In the month prior to admission, the patient had experienced frequent bouts of postprandial vomiting of undigested food and a 15 lb. weight loss.

The personal and family history were unremarkable. In particular there was no history of abdominal surgery or familial polyposis coli. Physical examination revealed a poorly defined indurated mass

The authors report a case of a patient with desmoid tumor of the mesentery which was only partially resected. Residual tumor failed to respond to progesterone and ascorbic acid, but regressed after treatment with tamoxifen. The authors note the unusual location of the tumor, the response to hormonal manipulations, and the clinical course characterized by repeated episodes of upper gastrointestinal obstruction. Desmoid tumors may regress after treatment with progesterone, antiestrogens, and non steroidal anti-inflammatory drugs. Radiation therapy is effective in two-thirds of cases. Doxorubicin-based chemotherapy induced responses in children with desmoid tumors; its role in adult desmoid tumors is untested.

extending throughout the epigastrium and the periumbilical area.

The routine lab work showed a serum creatinine of 3.8 mg/dl. The abdominal CT showed a dense lesion encasing the small bowel compressing the right ureter, with right hydronephrosis.

On March 16, incomplete resection of the mesenteric mass was performed with jejunosubtransverse anastomosis and right nephrectomy. The pathology report of the lesion was desmoid tumor of the mesentery. Treatment with progesterone 100 mg intramuscularly daily and ascorbic acid 1000 mg p.o. was instituted. The post-operative course was uneventful and the patient was discharged home with the same treatment. On June 15, 1985, the patient

From the Division of Hematology Oncology, Jackson VA Medical Center and University of Mississippi Medical Center, Jackson, MS. (Dr. Balducci currently is Chief of Hematology and Oncology, Bay Pines VA Medical Center, Bay Pines, Florida.)

was readmitted to the JVAMC for upper gastrointestinal obstruction. The abdominal CT showed an enlarging peripancreatic mass (see Figure 1). After relief of the obstruction by nasogastric suction, progesterone and ascorbic acid were discontinued and treatment with tamoxifen 20 mg p.o. and Clinoril 100 mg (both drugs given twice daily) was initiated. The patient had been asymptomatic since discharge. On November 19, 1985, a repeated abdominal CT showed regression of the tumor (see Figure 2).

On March 11, 1986, tamoxifen was discontinued due to right femoral vein thrombosis. On September 19, 1986, readmission to the VAMC was prompted by a new episode of upper gastrointestinal obstruction from the tumor which required placement of a new anastomosis. The patient was seen last on June 11, 1987, and was free of symptoms.

Discussion

The primary location of the tumor, the development of renal failure and relapsing intestinal ob-



Figure 1. Mesenteric desmoid tumors on June 1985.

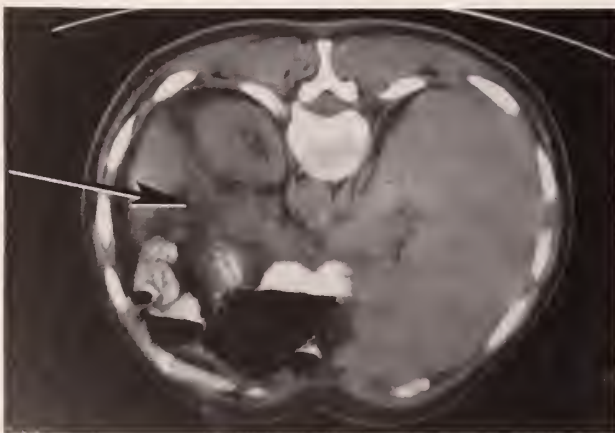


Figure 2. Reduced desmoid tumor mass following Tamoxifen treatment.

struction, and the response to tamoxifen are of interest in this case.

Reitamo *et al* has published the largest series of desmoid tumors, based on review of 386,080 pathology reports from four major Finnish hospitals.³ Of the 89 cases individuated by these authors, only 8% were primary mesenteric tumors, while the others were evenly distributed between the abdominal wall and extra-abdominal sites. These authors also confirmed the tendency of these tumors to occur in surgical scars and to develop during pregnancy.

A familial predisposition for desmoid tumors is likely. Jones *et al* confirmed the association with familial polyposis coli.¹⁰ Of 325 patients with familial polyposis, 29 had one or more desmoid tumors. Reitamo *et al* found an increased frequency of minor osseous malformations, such as cortical thickening, exostosis, cysts, compact areas, and sacralization of the fifth lumbar vertebra in patients with desmoid tumors and in members of the patients' family.³ These authors proposed a genetic defect of collagen synthesis as a cause of desmoid tumors.

The course of our patient is typical of unresectable desmoid tumors. Ureteral and intestinal obstruction resulted from tumor compression and invasion of these structures. Due to the slow growing nature of the tumor, repeated bypasses of the obstructed areas of the bowel produced prolonged symptomatic remission. Invasion of adjacent structure producing end organ dysfunction and failure is the main cause of morbidity and mortality in these non-metastasizing neoplasms.¹⁻³

The response to hormonal manipulations as experienced by our patient, had been previously described.⁷⁻⁹ The serendipitous observation of progesterone-induced regression of peritoneal fibromas inspired several attempts of hormonal treatment for desmoid tumors (see Table 1). The rationale of antagonizing estrogenic effects is based on epidemiological and laboratory data.

Relevant epidemiological findings suggesting estrogen stimulated tumor growth are a predilection for women and the simultaneous occurrence of desmoid tumors and pregnancy.³ Also, Reitamo *et al* observed a higher incidence of these tumors in women with estrogen predominance than in those with progesterone predominance or with balanced hormonal production.³

Laboratory findings favoring estrogen dependence of desmoid tumors were provided by two groups of investigators. Hayry *et al* found measurable estrogen receptors in 3 of 4 tumors.¹¹ Lin *et al* detected estrogen receptors in 5 and antiestrogen binding sites

TABLE 1
ENDOCRINE TREATMENT OF DESMOID TUMORS

Author	Location of the Tumor	Number of Patients	Agent
Lanari <i>et al</i> ⁷	Mediastinum	7	Progesterone 100 mg i.m. q d until response 500 mg (depot) i.m. thereafter weekly
KinzBrunner <i>et al</i> ⁸	Back	1	Tamoxifen 20 mg p.o. q.i.
Wilson, <i>et al</i> ⁹	Breast	1	Toremifem 200 mg p.o. q. d.

in 12 of 15 tumors.¹²

The mechanisms of estrogen stimulation is unclear. Lippman *et al* reported estrogens to elicit the secretion of Platelet Derived Growth Factor (PDGF), from 2 human breast cancer cell lines.¹³ As PDGF is a powerful stimulator of collagen synthesis, it is tempting to hypothesize the same mechanism in the pathogenesis of desmoid tumors. According to this hypothesis, the accumulation of collagen in desmoid tumors is due to excessive productions — rather than to impaired destruction — of type 1 or 3 collagen. Excessive collagen synthesis was described by Uitto *et al* in the histogenesis of cheloids, lesions which are similar to desmoid tumors, microscopically.¹⁴

Other therapeutic attempts, beside hormonal manipulations, have included use of high dose ascorbic acid, non-steroidal anti-inflammatory agents, radiation therapy, and chemotherapy.^{4-9, 15}

The combination of indomethacin (75-100 mg daily) and ascorbic acid (1.5-5 gm daily) induced regression of three desmoid tumors according to Waddell and Gerner.¹⁵ The rationale of this combination is not clear. The authors hypothesize that indomethacin inhibits cell proliferation by inducing intracellular accumulation of cyclic AMP, while high dose ascorbic acid would oppose catabolism of indomethacin.

Radiation therapy produced inconsistent results. Kiel and Suit reviewed the cases of 106 patients included in 9 reported series.⁴ Of these patients, one third failed to respond to radiation therapy. By re-

viewing their own experience, these authors established an inverse relationship between response to radiation and dose administered: Only 2 of 11 patients receiving a dose ≥ 6000 cGy failed to experience a complete disappearance of the tumor. Assad *et al* used brachytherapy with Ir-192 in 12 incompletely resected patients.⁵ After a minimal follow-up of two years, 10 patients have remained free of disease.

The role of cytotoxic chemotherapy is not defined. Goepfert *et al* reported improvement in 7 pediatric patients with desmoid tumors of the head and neck treated preoperatively with a doxorubicin containing combination of drugs.¹⁶ It is not clear whether the response to chemotherapy obtainable in the highly cellular desmoid tumors of infancy may be reproduced in the poorly cellular neoplasms of adulthood. ★★

Dr. Balducci: Bay Pines VA Medical Center,
Bay Pines, FL (33504)

Acknowledgement

The authors wish to thank Ms. Sandra Calhoun for preparing the manuscript.

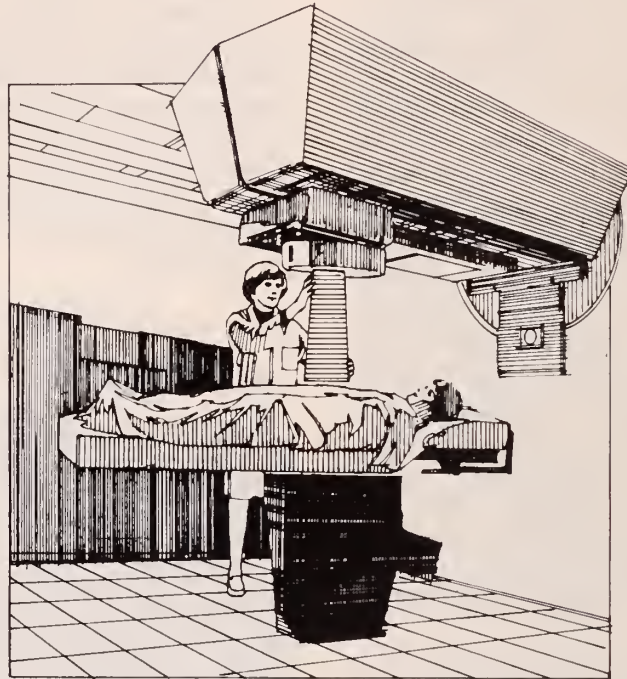
References

1. Dahn I, Jonsson N, Lundh G: Desmoid Tumors: A Series of 33 Cases. *Act Chir Scand* 126:305-314, 1963.
2. Mason JB: Desmoid Tumors. *Ann Surg* 92:444-453, 1930.
3. Reitamo JJ, Scheinin TM, Hayry P: The Desmoid Syndrome. *Am J Surg* 151:230-237, 1986.
4. Kiel KD, Suit HD: Radiation Therapy in the Treatment of Aggressive Fibromatoses. *Cancer* 54:2051-2055, 1984.
5. Assad WA, Nori D, Hilaris BS, Shiu MH, Hajdu SI: Role of Brachytherapy in the Management of Desmoid Tumors. *J Rad Oncol Biol Phys* 12:901-906, 1986.
6. Goepfert H, Cangir A, Ayala AG, Eftekhari F: Chemotherapy of Locally Aggressive Head and Neck Tumors in the Pediatric Age Group. *Am J Surg* 144:437-444, 1982.
7. Lanari A: Molinas FC, Rios MC, Paz RA: Eficaz Tratamiento De Diversas Fibromatosis Cone Progesterona Medicina (Buenos Aires) 38:123-132, 1978.
8. Kinzbrunner B, Ritter S, Domingo J, Rosenthal CJ: Remission of Rapidly Growing Desmoid Tumors After Tamoxifen Therapy. *Cancer* 52:2201-2204, 1983.
9. Wilson AJ, Baum M, Singh L, Kangus L: Antiestrogen Therapy of Pure Mesenchymal Tumor. *Lancet* 1:508, 1987.
10. Jones, IT, Jagelman JD, Fazio VW, Lavery IC, Weakly FL, McGannon E: Desmoid Tumors in Familial Polyposis Coli. *Ann Surg* 204:94-97, 1986.

JOURNAL MSMA policy prohibits publishing more than ten references. For a complete bibliography, please contact Dr. Balducci.

Now available to Mississippi State Medical Association members, protection from one of America's leading diseases **CANCER.**

"CANCERPAY PLUS"



- "CancerPay Plus" is a quality cancer policy supplement to your present health insurance.
- Offered by the Mississippi State Medical Association, "CancerPay Plus" provides excellent benefits to physician members of MSMA, their employees and families.
- Reduced rates through Association affiliation
- Payroll deducted with groups as small as one participant.
- Pays in addition to all other insurance, including Medicare.
- Intensive Care and Dread Disease riders available.

For Complete Details of Plan Call or Write:

Scott Shappley

MISSISSIPPI STATE MEDICAL ASSOCIATION

P.O. Box 55509

Jackson, MS 39216

(601) 354-5433 — Watts 1-800-682-6415

Address of the President

W. LAMAR WEEMS, M.D.
Jackson, Mississippi

AT THIS MEETING IN 1977 Lyne Gamble, in his presidential address, spoke of the debacle in the formation of the Mississippi Health Systems Agency, expressed concerns about the potential for national health insurance, and called upon the Federal Government to realistically fund its health programs for the poor. He also endorsed health education in the public schools and called for a dues increase so that MSMA could better meet its responsibilities.

Succeeding presidents over the past decade have each selected various points of emphasis reflecting their individual priorities and the issues of the day. Jim Gilmore saw the need to strengthen public relations. Carl Evers analyzed the significance of apathy among many in the profession. Gerald Gable pointed to the threats to doctor-patient relationships implicit in third party payor policies and in the emphasis on cost containment by industry and labor. Paul Moore defended the free enterprise system of health care. The greatest challenge facing the medical profession according to Faser Triplett was the problem of escalating health care costs. Sidney Graves described the period of transition which was beginning to envelop the profession. Whit Johnson recognized the threat posed by the entry of business and industry and insurance companies into the medical care field as "for profit" competitors for patients. Ellis Moffitt emphasized the importance of membership and called upon the medical profession to be the flag bearer for holding down health care costs. Ralph Brock made a plea for unity and discussed physician manpower, access to care, medical education and quality and financing of health care. Finally, Joe Burnett reminded us last year of the obligation, passed down from the founding fathers, to participate in political activities. Woven into all

"Leadership in this industry is not a divine right of the medical 'priesthood' nor does it properly come embellished with royal privilege. It is, in fact, a duty."

of these messages has been a growing vexation at the diminishing influence of physicians in health affairs.

Today, a sense of helplessness is beginning to pervade the profession itself and, in connection, we see a disturbing inclination of many physicians to seek personal advantage at the expense of the system in preparation for expected calamities. Indeed, it makes little practical sense for one to sacrificially invest precious time and money in these waning days of the "golden age of medicine" in the effort to influence public policy and in the support of organized medicine unless there exists some hope that the ominous trends of the last decade can be reversed.

Such hope does exist. The members of this House of Delegates, who are the leadership of the profession in this state, believe that it does, or else we wouldn't be here. But upon what grounds does the hope rest? Will we go from here to rouse our apathetic colleagues to all join the Mississippi Political Action Committee in a groundswell of effective political action? Will politicians, en masse, suddenly be led to see the value of such intangibles as professionalism and doctor-patient relationships in time to avert the destruction of these treasures? Will lawyers soften their attack upon us under the tort system as an expression of their humanitarian instincts? Will entrepreneurs, of their own free will, recognize that profit motives must be tempered by human con-

Dr. Weems served as 1987-88 president of the MSMA.
Presented June 16, 1988, at the 120th Annual Session in Biloxi.

cerns and by fiscal restraint in the medical marketplace because we are dealing with human lives? Will the public and the advocates of their various special interests accept our explanation that high quality health care for all people can't be had for a cheap price? In sum, is it realistic to expect this society to once more obsequiously yield to our influence like it did in the good old days of professional sovereignty? We had better not cling to such forlorn hope.⁵

"The conventional need for physical participation in the political process still applies. But in order to enhance our credibility, we need to do a better job of aligning our political agenda with public concerns."

When someone reviews this presidential message years hence, I want the central point to be the recognition of the importance of professional power. The word, power, may evoke negative feelings among the faint of heart, because it invites conflict, but the concept is fundamentally important. Call it something else if "power" offends — influence, authority, clout, sovereignty. Call it anything you like, but recognize that the reciprocal is weakness and that weakness is not a desirable attribute of a professional group. Leadership requires strength and a leadership role is required of the medical profession if quality of health care is to be maintained at the level which the American public has come to expect. Arrogance is not intended in such statements and bravado is out of place in an endeavor as sobering and as humbling as medical practice. Leadership in this industry is not a divine right of the medical "priesthood" nor does it properly come embellished with royal privilege. It is, in fact, a duty, a burden to be assumed in the public interest and in the pursuit of meaningful lives for ourselves as medical professionals. Leadership extracts a price and the price is often dear. But the rewards are great for all concerned when responsible physicians lead; especially for the sick.

The acquisition of power by organized medicine is a socially laudable goal so long — and only so long — as the ethical and scientific standards and the objectives of organized medicine coincide with the public interest. By and large, they do. Based upon that conviction, I believe that the Mississippi State Medical Association specifically, and organized medicine generally, should consciously and deliberately, and without apology, cultivate all the various sources of power which may be available,

including political influence, ownership and collective bargaining.

The conventional need for physician participation in the political process still applies. But in order to enhance our credibility, we need to do a better job of aligning our political agenda with public concerns. The problem of access to health care for the uninsured poor and the public need for effective, physician-directed utilization review and quality assurance represent splendid opportunities for physicians to gain public favor. Indeed, numerous opportunities exist for physicians to render public service, some of which are included in the business of the House at this meeting. We should seize these opportunities, not only because of ethical obligations, but also because such commitments strengthen our hold upon public support. To that end, also, we need to upgrade our public relations capabilities to better ensure that we get credit for what we do. Monitoring and molding public opinion is a highly developed science in itself. MSMA is currently handicapped in the political arena and within the framework of its own organization by deficiencies in public relations. It is a resource which we can't prudently continue to do without.

Much of the control of the health care system is being delegated to the marketplace these days by business and industry and by government. Power in the marketplace is largely mediated through ownership. The notion that physicians as an organized profession should attempt to share the power derived from ownership in the health care industry led to the formation of Mississippi Physicians Health Plan. The fate of this project still hangs in the balance and will be decided in the long run by the level of determination of the membership to challenge the considerable power of commercial insurance companies and various managed health plans who are waiting in the wings for us to falter.

Unionism is a potential power source whose time has not yet come for physicians. Unfortunately, it probably eventually will, as corporate medicine grows and as the ranks of employed physicians continue to swell. Already, suggestions have been made for MSMA to establish a mechanism to negotiate disputes with insurance companies, a rudimentary form of collective bargaining.

If the pursuit of benevolent power is a goal of the medical profession, as I believe that it should be, the famous words of Lord Acton must be remembered, "Power tends to corrupt." Physicians are not incorruptible, of course. The stronger we are as a profession the more essential it becomes to buttress our moral and political position with the

highest of ethical standards and with stringent requirements of competency testing and peer review. The activities of the licensing board and the Mississippi Foundation for Medical Care, as well as hospital staffs and local ethics committees, contribute substantially to preservation of professional influence in the health care system.

In the final analysis, organized medicine is a necessary mechanism for the cultivation of professional power and a principal vehicle for its expression. All physicians benefit from the efforts of organized medicine. All physicians rightly should feel some obligation to belong and to contribute. The family of medicine embraces component societies, state societies and the AMA. All are so interdependent and so vertically integrated that they are, indeed, components of one organization. Unified membership, therefore, is not an artificial device contrived to enhance AMA membership. It is simply a recognition of the reality of the true form and function of organized medicine at all levels in today's environment.

Today's environment is far different from yesterday's and tomorrow will undoubtedly bring even more new conditions. In Mississippi, the Mississippi State Medical Association is the undisputed main champion of the medical cause. Its record of achievement in behalf of physicians and their patients has been outstanding. However, the time has come to recognize that its organizational structure, erected in a bygone era, is beginning to show signs of obsolescence. At the end of last year's annual meeting I asked Joe Burnett, the outgoing president, to investigate the availability of advisory services to help evaluate our need for change. His report back to the Board eventually led to a decision by the Board of Trustees to conduct a strategic planning project under the direction of the consulting firm, Coopers and Lybrand. This project is the key to our future. It is incumbent upon all members to cooperate fully as strategic planning moves forward; to accept jobs when asked to serve and to respond promptly when information and opinions are requested.

"The stronger we are as a profession the more essential it becomes to buttress our moral and political position with the highest of ethical standards and with stringent requirements of competency testing and peer review."

In all of its deliberations at this meeting, I hope the House will act to enhance the power of the medical profession. We are, after all, the heirs and the repository of the highest level of skill and knowledge and ethical standards in the health care industry. To shrink from this engagement would be to tolerate the continued drift of influence in the health care system to politicians, entrepreneurs and other interlopers because power vacuums do not exist for very long. We would do ourselves, our patients, and the noble profession of medicine a great disservice if we failed to face up to this responsibility.

In our travels, in our public appearances, and in our personal contacts, Nanette and I have been pleased and proud to represent the Mississippi State Medical Association. We are grateful for the honor and for the opportunity to have participated in a leadership role in the momentous events which are unfolding. All of you are to be commended for the work which you do and for your dedication. In particular, I want to congratulate the Auxiliary for its many accomplishments and the Young Physician's Section for its auspicious beginning. One more common theme was conspicuous in all of the President's Messages which I reviewed and that was an appreciation of the fine support and dedicated service of Charlie Mathews and his staff. In closing, I want to echo all of those sentiments and to add my own heartfelt expression of thanks for their guidance and friendship this year. ★★

2500 North State Street (39216)



THE PRESIDENT'S PAGE

DAVID R. STECKLER, M.D.

Attending the House of Medicine

Attending my first AMA House of Delegates meeting in June was an experience I will never forget. To those who might think that the occasion is a structured, undemocratic process let me assure you that it is quite the opposite.

The over 400 state and specialty society delegates in attendance discussed, debated and arrived at policy decisions on every current medical issue from AIDS to utilization review. At times I thought that if there was any fault with the process it was that it was too democratic.

Congratulations are in order because of two special events occurring at the meeting. Our own Mrs. J. Ed Hill (Jean) was elected president-elect of the AMA Auxiliary. A first for Mississippi! Jean's office will require extensive travel throughout the United States to present the programs and activities of the AMA Auxiliary. The other special event was the inauguration of Dr. Jim Davis of North Carolina as president of the AMA. Many of you will remember Dr. Davis as an effective participant in one of our past MSMA medical socioeconomic conferences.

Our colleagues at the meeting from throughout the country appeared to be concerned about the same issues we face in Mississippi. Namely, tort reform and care of the medically needy. Additionally, the issue of spiraling health care costs and public reactions to this appeared to be a great concern.

We are being blamed for what many believe are excessive health care costs. Regardless of our opposing opinions in this regard the fact remains that we control some 75 percent of the dollars spent on health care services in this country. I believe this fact behooves us to take an active role in understanding health care costs through such mechanisms as "Economic Grand Rounds" in hospitals and participation in utilization review programs. We should also understand that there is competition for limited health care dollars in such programs as Medicare. Monies for physicians' services, medical equipment such as motorized scooters, home health care, etc. come from the same pot.

A "Participation 88" program at the meeting presented physicians speaking on behalf of George Bush and Michael Dukakis. The Dukakis supporter, who interestingly had never practiced medicine in a private setting, noted that mandatory assignment had been enacted by a unanimous vote of the Massachusetts legislature and that physicians needed to ask themselves "what is the public telling us?" The Bush supporter recited the effects of a Dukakis' administration. Namely, that many physicians had left Massachusetts because of mandatory assignment and the number of orthopaedic surgeons, obstetricians and general surgeons was down 20 percent.

It was an exciting and meaningful meeting of "The House of Medicine" and I would encourage each of you to attend a future meeting.

A handwritten signature in dark ink, appearing to read "David R. Steckler". The signature is fluid and cursive, with a long horizontal line extending to the right.

EDITORIALS

JOURNAL OF THE
MISSISSIPPI STATE
MEDICAL ASSOCIATION

VOLUME XXIX, NUMBER 8

AUGUST 1988

Borborygmia I

Student Goals — Change

Our free enterprise system has given us the best medical care in the world. Our system has provided incentive to technological advancement and unsurpassed diagnostics. We have always been proud of our ability to attract the brightest people into medicine and allied health sciences. No longer do we have that firm grip on the "best." This is evidenced by the medical school applications acceptance rate across the country falling from 4 to 1 in years past to 1.3 to 1 now. More and more of the brightest students are going into other fields of science, other professions, and into business.

Problems in Paradise

This has been variously attributed to government involvement in medical practice environment; unrealistic peer organizational pressures; loss of physician's image; declining economic advantage in the field of medicine; increased costs of medical school and graduate training; medical malpractice; and possible future physician surplus. What to do about all these problems is the burning question, and all areas of medicine are trying to find the answers.

No Easy Solutions

There are no easy answers but it seems to me that the best answers to some of these questions lie in our relationship and involvement in organized medicine. Our group pressure and one-on-one pressure on our congressmen and legislators will ultimately make an impact in getting done legislatively what we need to accomplish.

Our image has suffered because of a surmised increased interest in money rather than our patient's care. What to do about this . . . go back to being the concerned and caring personal physicians that got us top respect in the past.

Help is already on the way for relief of the rural/

urban pay differences for physicians and also, perhaps, relief of the procedural and cognitive differences in fees.

Private Funded Scholarships

The increased costs of medical training can't be changed much, but the approach to the problem can be. We need more emphasis on, and involvement in, providing an increased number of scholarships in medical schools and residency programs by the private sector. You and I, and our friends, need to do more along these lines so that medical schools do not evolve into schools just for the rich. Our medical societies, and perhaps others in this state, have surplus money that could be used for scholarships — either through their own programs or one that is already set up such as the Guyton Fund at the University of Mississippi.

Incentives Equal More Rural Physicians

Physician surplus may cure itself in the declining number of applicants to medical schools and the reduction in medical school class size. Another way to help this problem is to give tax incentive (either state, federal, or both) to those physicians who go into rural areas (i.e., towns under 5000 or 10,000 population). It might just reduce the overcrowding of doctors in the urban areas.

Well, I'm not certain whether these are gentle rumblings of borborygmi or just a few "gut" feelings about some of the issues facing us now. Thank God I'm a physician.

JOE JOHNSTON, M.D.
Associate Editor

The editors invite your comments, inquiries, and suggestions. Please address letters to the Editors, *Journal of the Mississippi State Medical Association*, P.O. Box 5229, Jackson, MS 39216.

Thanks to Our Exhibitors

The MSMA expresses appreciation to the following exhibitors, who participated in the Technical Exhibit during the 120th Annual Session.

Abbott Laboratories	Miles, Inc. Diagnostics Division
AMA Advisers, Inc.	MS Army National Guard
AMA/Medical Payment Systems, Inc.	MS Baptist Chemical Dependency Center
Automated Health Systems	MS Baptist Medical Center
Becton Dickinson & Co. — Primary Care Diagnostics	MS Foundation for Medical Care, Inc.
Bedsole Medical Companies	MS Neuro-Diagnostic Lab, Inc.
BESCO	Morgan Keegan & Company
Bienville/Pinegrove Recovery Centers	Paine Webber
C.V. Mosby Company	Pfizer Laboratories
Capital Medical Supply, Inc.	Puckett Laboratory
CareMed, Inc.	Roche Biomedical Labs, Inc.
Charter Hospital of Jackson	Roche Labs
Ciba Pharmaceutical Company	Sampson, Howard & Ashcraft
Data General	Seako, Inc.
DP Associates, Inc.	Sema, Inc./Electromedics
Encyclopedia Britannica — USA	Shearson Lehman Hutton
Evangeline Medical & X-Ray Distributors, Inc.	Sims, Prosthetics & Orthopedic Appliances
Forrest General Hospital	Smith Kline & French Laboratories
Genetech, Inc.	Southern Medical Association
Glaxo, Inc.	Sunbelt Computer Systems
Griffing and Associates	Sunmark
Health Care Suppliers, Inc.	Syncor Parenteral Pharmacy Services
Hoechst-Roussel Pharmaceuticals	Texas Instrument
IC Systems, Inc.	Total Care, Inc.
Janssen Pharmaceutical	Travelers Insurance Co. — Medicare
Jefferson X-Ray Services, Inc.	Trusty Company
Key Pharmaceuticals	Unifirst Bank for Savings
Kimberly-Quality Care	US Air Force
Lanier Business Products	US Army Health Professional Support Agcy.
MSMA Benefit Plan and Trust	US Navy Reserve
Medic Computer Systems	Upjohn Company
Medical Assurance Company of Mississippi	Weight Watchers
Medical Pathology Laboratory, Ltd.	Jon Wimbish — Disability Specialist
Merck Sharp & Dohme	Wismer-Martin
Merrell Dow Pharmaceuticals, Inc.	

Dr. Steckler Installed as MSMA President; Dr. Hill Named President-Elect

Dr. David R. Steckler of Natchez was inaugurated 1988-89 president of the MSMA at the closing meeting of the 120th Annual Session held in Biloxi in June. He succeeds Dr. W. Lamar Weems of Jackson. Dr. J. Ed Hill of Hollandale was named president-elect.

The new MSMA president has served as president-elect and as chairman of the Board of Trustees. He has served terms on the Mississippi State Board of Health and the Mississippi State Board of Medical Licensure, and is a past president of the Mississippi Association of Pathologists.

Dr. Hill, the new president-elect, was chairman of the Board of Trustees for 1987-88. He also serves as delegate to the American Medical Association. He is a fellow of the American Academy of Family Physicians, a past president of the Mississippi Acad-

emy of Family Practice, and was the 1987 recipient of the MSMA Community Service Award.

Some 700 physicians, spouses and guests registered for the five-day session, which featured a full program of scientific, business and fellowship activities.

Among special guests was Dr. William S. Hotchkiss, president of the AMA, who addressed the House of Delegates. Another special guest was Mark Shields, columnist and political commentator, who entertained at the annual MSMA/MSMA Auxiliary membership banquet.

In addition to electing new officers, the House of Delegates took action on reports and resolutions concerning health care in Mississippi. A summary of House actions appears in this issue.



Dr. J. Ed Hill, left, chairman of MSMA's Board of Trustees, administers the oath of office to Dr. Steckler. Assisting was Charles L. Mathews, center, MSMA executive director



Dr. Weems, MSMA's 1987-88 president, addressed the House of Delegates.



The President's Reception was an opportunity for Dr. and Mrs. Weems to visit with long-time friend, Mrs. Dempsey (Margaret) Amacker of Natchez, right.



Mrs. D. P. (Ruth) Smith, left, president-elect of MSMA's Auxiliary, and Mrs. Ed (Jean) Hill, an Auxiliary past president, greet a reception guest along with Dr. Hill, chairman of the MSMA Board of Trustees.



Dr. Weems and Dr. Hill paused for a photo with Trustmark officials, sponsors of the President's Reception. From left are Mr. and Mrs. Alvis Hunt; Mr. and Mrs.

Jimmy Rimmer; Dr. Weems; Dr. Hill; Mr. and Mrs. Jimmy Shumaker; Mr. and Mrs. Clyde Edwards; and Mr. and Mrs. Sam Smith-Vaniz.

Elections Highlight House of Delegates Sessions

Delegates to the 120th Annual Session named Dr. J. Ed Hill of Hollandale as MSMA's 1988-89 president-elect, and elected Dr. Walter Rose of Indianola to a post on the Board of Trustees. Dr. Lee Rogers of Tupelo was re-elected to the Board of Trustees, representing District 3.

Dr. Ted Blanton of Jackson was named to one of MSMA's three vice-presidential posts and Dr. George Abraham of Vicksburg was elected associate editor of *Journal MSMA*.

Elected to posts on the MSMA delegation to the AMA were: Drs. Sidney Graves of Natchez and J. Elmer Nix of Jackson, delegates; and Drs. W. Joseph Burnett of Oxford and Alton B. Cobb of Jackson, alternate delegates.

MSMA's Council on Scientific Assembly will have two new members as a result of the June 19 elections. Dr. John Hassell of Laurel was elected chairman of the Medicine Plenary Group, and Dr. Howard Freeman of Jackson was named chairman of the Hospital Medical Staff Section.

Elected to fill vacancies on councils were: Dr. Eric Lindstrom of Laurel, Council on Constitution and Bylaws; Drs. Thomas S. Glasgow of Oxford, Francis S. Morrison of Jackson, and Thad Waites of Hattiesburg, Council on Budget and Finance; and Drs. Ernest Reeves of Collins, Joe Herrington of Natchez, and Bill Wansley of Biloxi, Judicial Council;

Also, Drs. Eugene Wood of Jackson and Dewitt Crawford, Council on Legislation; Drs. Dayton Whites of Lucedale, John R. Shell of Vicksburg, and Andrew Martinolich of Bay St. Louis, Council on Medical Education; Drs. A. Jerald Jackson of Hattiesburg, Elmo P. Gabbert of Meadville, and Robert F. Carter of Biloxi, Council on Medical Service; and Drs. James S. Robbins of Greenwood, George Abraham of Vicksburg, and David L. Clippinger of Gulfport, Council on Public Information.

Board of Trustees Elects New Officers

Dr. David Owen of Hattiesburg was elected chairman of MSMA's Board of Trustees during the board's meeting June 19 in Biloxi. Dr. Mal G. Morgan of Natchez was named vice-chairman, and Dr. Stanley Wade of Meridian was elected secretary.

Other members of the board are: Drs. Stanley Hartness of Kosciusko, Lee H. Rogers of Tupelo, John P. Lee of Forest, Fred L. McMillan of Jackson, David L. Clippinger of Gulfport, and Walter Rose of Indianola.



Dr. J. T. Davis of Corinth, left, presented the James Grant Thompson Memorial Past President's Pin to Dr. Weems.



Dr. Steckler addressed the House following his election as 1988-89 president-elect.



Peggie (Joe) Herrington, MSMA Auxiliary President, described auxiliary activities in her report to the MSMA House of Delegates.



President Weems, pictured with Deposit Guaranty Bank officials, sponsors of the Friday night reception. From left are Mr. and Mrs. Albert White and Mr. and Mrs. L. H. Lee.



Members of the Hattiesburg delegation included past president Gerald Gable, M.D., and Thad Waites, M.D.



The David Steckler family, pictured following Dr. Steckler's inauguration as president.



Dr. Carl Evers, right, and Dr. Alton Cobb, members of the delegation to AMA, are pictured during the reception.



Reference committee members look over reports. From left are Drs. George Hamilton, James O. Stephens, and Jim Hughes.



Dr. Stanley Hartness, left, and Dr. Gene Wood talk with an exhibitor.



Dr. William L. Thornton of Meridian, left, received the 1988 MSMA Community Service Award, presented by Dr. Weems.



Dr. Weems, right, presented a check for \$30,611.34 in AMA-ERF contributions to Dr. Norman A. Nelson, dean of the University of Mississippi School of Medicine.



Dr. Fred Guidry, chairman of MMPAC board, right, accepts an AMPAC award from Dr. Randolph Smoak of Orangeburg, South Carolina.



Dr. Norman Nelson, right, accepted an AMA award for student membership recruitment activities from Dr. Hotchkiss, AMA president.



Among those attending the traditional past president's breakfast were, from left, Dr. Carl Evers, Dr. Faser Triplett, Dr. Everett Crawford, Dr. Whitman Johnson, and Dr. Sidney Graves.



MSMA past presidents, pictured at their annual breakfast, are, from left, Dr. Arthur Derrick, Dr. Ellis Moffitt, Dr. Lamar Weems, Dr. Ralph Brock, Dr. J. T. Davis, and Dr. Guy Vise.

Dr. Nina Goss-Moffitt moderated the Medicine Plenary Session. Here she accepts an appreciation award presented to her by the Mississippi Psychiatric Association.

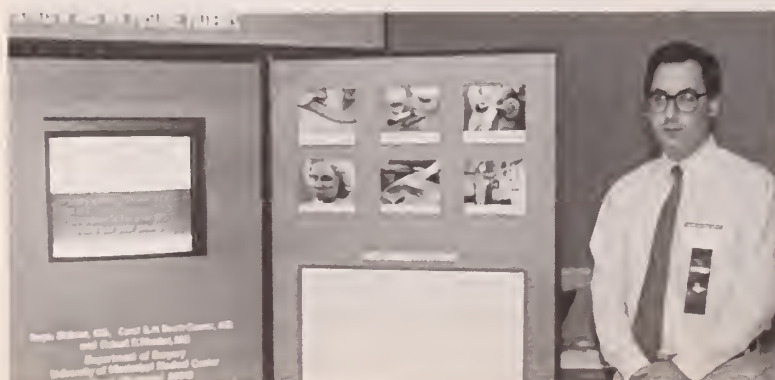


Dr. Jim Hughes, chairman of the Surgery Plenary Group, introduces a speaker.



Above, "Transrectal Prostate Ultrasound," presented by Mississippi Urology Clinic, won the first place Aesculapius Award for excellence in scientific exhibits. Dr. Joel Alvis is pictured with ultrasonographer Sherry Dority.

Below, Dr. Ralph Didlake is pictured with the second place scientific exhibit, "Safety Factors in the Perioperative Care of Hepatitis B and HIV Positive Patients."



Dr. Ralph Abraham moderated the scientific session of the American College of Surgeons, Mississippi Chapter.



Dr. Ed Thompson, state epidemiologist, lectured during the Surgery Plenary Session.



Presiding over the 65th Annual Session of the MSMA Auxiliary was 1987-88 president, Peggie Herrington, pictured with her husband, Dr. Joe Herrington.



Mrs. D. P. (Ruth) Smith was installed as 1988-89 MSMA Auxiliary President.



Officers of the MSMA Auxiliary from left, include: Mrs. D. P. (Ruth) Smith, president; Mrs. Eric (Nancy) Lindstrom, president-elect; Mrs. Kenneth (Susan) Hines, first vice president; Mrs. George (Ginny) Abraham, third vice president; Mrs. Ben (Kathy) Carmichael, second vice president; Mrs. Henry (Barbara) Webb, recording secretary; Mrs. Billy (Sylvia) Walker, treasurer; Mrs. Lee (Merrell) Rogers, parliamentarian; and Mrs. A. T. (Martha) Tatum, assistant parliamentarian.



Dr. Jimmy Waites presided as speaker of the House of Delegates.



Dr. Vann Craig, vice speaker, helped conduct the business of the House of Delegates.



Dr. Faser Triplett of Jackson introduced AMPAC representative Dr. Randolph Smoak to the House.



Delegates mark their ballots.

120th Annual Session, June 15-19, 1988

HOUSE OF DELEGATES HANDLES BUSY AGENDA

The House of Delegates of the Mississippi State Medical Association handled a busy agenda of reports and resolutions at the 120th Annual Session, held in Biloxi.

The House of Delegates took these major actions:

- Affirmed medical tort reform as the association's top legislative priority.
- Created a committee to establish and coordinate legislative action on care of the medically needy.
- Endorsed and urged support for a "Senior Care Program" to assist needy Medicare beneficiaries to obtain medical services.
- Endorsed establishment of an "Ethics Panel" to study and serve as a resource on ethical issues.
- Approved a \$25.00 dues increase in 1989 and 1990.
- Called for full expansion of the MS Medicaid Program and endorsed a proposal for Congress to establish uniform eligibility and benefits for Medicaid across all states.
- Directed that a study be conducted of blood procurement and disbursement services in Mississippi.
- Directed that specialty section advisory panels be established to address utilization review, quality assurance and physician reimbursement concerns.
- Urged repeal of Medicare's "Unnecessary Services" requirements.
- Endorsed a public information program for tobacco-free society.
- Endorsed establishment of a media awards program for excellence in reporting health care issues.
- Urged and reaffirmed support for a School Health Education Program.
- Supported efforts to end third-party coverage discrimination against any broad category of illness.
- Supported legislative action on the use of pesticides.
- Supported colocation of the MS Children's Rehabilitation Center and the Blake Clinic.
- Opposed any legislation permitting optometrists to prescribe medication for the treatment of eye or systemic diseases.
- Supported CME as a requirement for appointment or reappointment to the hospital medical staff.
- Condemned and urged relief from inequities in DRG payments to rural hospitals.
- Urged relief from inequities in Medicare payments between various areas of the country.
- Urged solutions for a shortage on long-term care beds in the state.

- Identified quality and necessary medical care as the prime consideration of physicians in ordering home health care services and urged consideration of public hospitals as providers of such services.
- Directed the Board of Trustees to develop a suggested format for presidential visits to the component societies.
- Endorsed presentation of a statewide public relations workshop for physicians.
- Voted to move the annual session to Jackson in 1990 on a trial basis.
- Presented checks totalling \$30,611.34 to the University of Mississippi School of Medicine. The gifts represent unrestricted and medical education AMA-ERF contributions by Mississippi physicians and spouses.

Serving on Reference Committees of the House were:

Reference Committee on Rules and Order of Business

Whitman B. Johnson, Jr., M.D., Chairman
 Kate Aseme, M.D.
 Billy Wayne Long, M.D.

Reference Committee on Reports of Officers, Board of Trustees and Councils

Eugene Wood, M.D., Chairman
 James O. Stephens, M.D.
 George McGee, M.D.
 George C. Hamilton, Jr., M.D.
 James L. Hughes, M.D.

Credentials Committee

Don Q. Mitchell, M.D., Chairman
 Hugh A. Gamble, II, M.D.
 Harold K. Hudson, M.D.

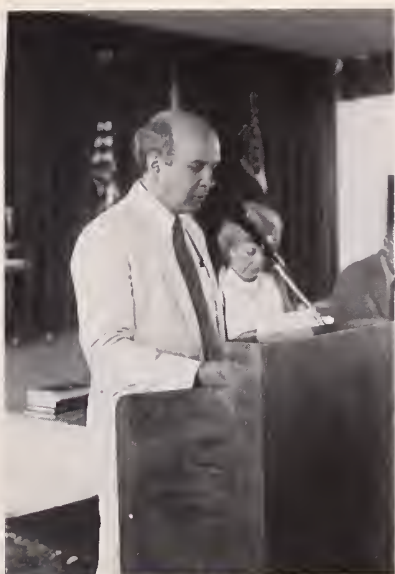
Reference Committee on Constitution and Bylaws

Max L. Pharr, M.D., Chairman
 Eric E. Lindstrom, M.D.
 Dayton E. Whites, M.D.

Nominating Committee

Mal G. Morgan, M.D., Chairman
 Arthur A. Derrick, M.D.
 Ed Hemness, M.D.
 Steve Parvin, M.D.
 Dewitt Crawford, M.D.
 Eric Lindstrom, M.D.
 Roy Duncan, M.D.
 Julian Henderson, M.D.

**121st Annual Session
 May 31-June 4, 1989
 Biloxi, MS**



Dr. Mal G. Morgan reads the report of the Nominating Committee prior to the elections.



Dr. Don Mitchell, secretary-treasurer, announces the winners of awards.



Dr. George McGee presented a reference committee report to the House.



The House of Delegates in session.



Dr. Waite presented the first copy of the new MSMA pictorial directory to Dr. Ray Lyle, who was instrumental in getting the project underway.



Above, an exhibitor demonstrates a product for Dr. J. T. Davis. Below, medical students and residents were among those who viewed the scientific exhibits.



Above, Mrs. Ivan Zamora displays her winning catch in the fishing tournament. Below, left to right, are other winners, Steven Parvin, Brandon Morgan, and Wesley Keel.



UMC Announces Faculty Appointments

Seventeen have been named in medical and centerwide faculty appointments at the University of Mississippi Medical Center.

Dr. Norman C. Nelson, UMC vice chancellor for health affairs, announced the appointments following approval by the Board of Trustees of State Institutions of Higher Learning.

In the School of Medicine, Dr. Anastasios A. Mihas was named associate professor of medicine; Dr. Darla I. Bakersmith, Dr. Andrew C. Lin and Dr. Rathel L. Nolan, III, were named assistant professors of medicine; and Dr. Ralph C. Atkinson, III, Dr. Jo Luresa Harbour and Dr. Shirley D. Schlessinger were named instructors in medicine. Dr. Vasdev S. Kahlon was appointed assistant professor of psychiatry and human behavior; Dr. Lisa Terre, instructor in psychiatry and human behavior (psychology) and Jenny A. Freedle, instructor in psychiatry and human behavior (social work). Dr. Mark Livingston Jutras was named assistant professor of obstetrics and gynecology; Dr. John A. Griswold, Jr. and Dr. Albert M. Koury, instructors in surgery; Dr. Brigid A. McIntire, instructor in radiology; Dr. Bonnie L. Noe, instructor in pediatrics; and Dr. Felix H. Savole III, assistant professor of orthopedic surgery.

Centerwide, Dr. March D. Ard was named assistant professor of anatomy and Dr. Victor L. Davidson, assistant professor of biochemistry.

Dr. Mihas earned the M.D. in 1967 at the University of Athens Medical School and took his internship at the Air Force General Hospital. He received the doctor of medical sciences in 1971 from the University of Athens following a research fellowship there. He then took an internship at Beekman Downtown Hospital and a residency at Sinai Hospital, and clinical and research fellowships in 1974 at the Harvard Medical Unit at Boston City Hospital and at Harvard Medical School and in 1975 at the University of Alabama. He was a research associate at the University of Athens Medical School from 1964-1966 and a member of the faculty at the University of Alabama 1975-1978. He was on the medical staff at the Hellenic Cancer Institute of Athens, Greece, as chief of the gastrointestinal endoscopy unit from 1979-1984, then as chief of gastroenterology until his Medical Center appointment.

Dr. Bakersmith earned the B.S. in 1975 at Birmingham Southern College and the M.D. in 1979 at Tulane University. A lieutenant commander since 1975 in the Medical Corps of the U.S. Naval Re-

serve, she took her internship and residency at the U.S. Naval Hospital, followed by a fellowship at San Diego Naval Hospital. She has been a member of the medical staff at Camp Lejeune Naval Hospital, North Carolina, and at the U.S. Naval Hospital at Portsmouth, Virginia, where she was head of noninvasive cardiology since July 1986.

Dr. Lin earned the B.S. in 1975 and the M.D. in 1979 at Far Eastern University. He took his internship at the Chinese General Hospital and residencies at the University of the Philippines-Philippine General Hospital and the University of Mississippi Medical Center, followed by a fellowship since 1985.

Dr. Nolan earned the B.A. in 1978 at Ole Miss and the M.D. in 1982 at the University of Mississippi Medical Center, where he took his internship, residency and a fellowship. He was a staff physician with the Mississippi Emergency Association from 1985-1986.

Dr. Atkinson earned the B.S. in 1981 at Mississippi College and the M.D. in 1985 at UMC, where he took his residency training. He has worked as a laboratory technician in the acute care laboratory and a research technician in anatomy at the Medical Center.

DOCTOR'S EXECUTIVE SET SPECIAL

500 Business Cards
500 Appointment Cards
500 Envelopes / 500 Letterheads

All printed on quality white paper with
black ink (Includes minimum typesetting) **\$79⁹⁹**

1000
ENVELOPES

#10 or
6¾ Regular White
24 lb. Envelopes

\$34⁹⁵

1000
6¾ BLUE
RETURN
ENVELOPES

\$29⁹⁵

Printed in Black Ink

Offer includes minimum typesetting / Window envelopes — Add 10%
All orders shipped U.P.S. or on our delivery trucks at no additional charge.

Steve Kowalski's

Northtowne Printers

3909 Northview Drive • Jackson, MS 39206

(601) 981-2675

Dr. Harbour earned the A.D.N. in 1974 at Meridian Junior College, the B.S. in 1981 at Mississippi State University and the M.D. in 1985 at UMC, where she took her internship and residency. Before going to medical school, she had been on the nursing staff at Methodist Hospital and Baylor College of Medicine, Oktibbeha County Hospital, St. Dominic Hospital and The University Hospital.

Dr. Schlessinger earned the B.S. in 1980 at Louisiana College and the M.D. in 1985 at Louisiana State University. She took her internship and residency at UMC.

Dr. Kahlon earned the B.S. in 1972 at Punjabi University and the M.D. in 1978 at Government Medical College, where he also took his internship and a residency. He completed a postdoctoral fellowship at the University of Alabama, and has been a resident in psychiatry at UMC since 1984.

Dr. Terre earned the B.A. in 1975 at Rutgers University, the M.A. in 1981 at Roosevelt University and the Ph.D. in 1987 at Auburn University. She took residency training at UMC, and has been a research associate at the Jackson Veterans Administration Medical Center since 1987.

Ms. Freedle earned the B.S. in 1977 at the Mis-

issippi University for Women and the M.S.W. in 1980 at the University of Alabama. She was director of social services at the Golden Triangle Regional Medical Center at Columbus from 1977-1982 and in private practice there from 1983-1985, when she came to Jackson as a social worker with Kidney Care, Inc. She has been on the social work staff at the Medical Center since May 1988.

Dr. Jutras earned the B.A. in 1977 at the University of Texas and the M.D. in 1982 at the University of Texas Medical Branch. He took his internship and residency at the University of Kentucky — Albert B. Chandler Medical Center followed by a fellowship at the University of Minnesota in 1986.

Dr. Griswold, a 1977 graduate of the University of Notre Dame, earned the M.D. in 1981 at Creighton University. He took his internship and residency at Texas Tech University Health Science Center, with fellowships at the University of Washington in 1987-1988.

Dr. Koury earned the B.S. in 1976 at Ole Miss and the M.D. in 1982 at the University of Mississippi Medical Center, where he took his internship, residency and a fellowship.

Dr. McIntire earned the B.S. in 1979 at Southeastern Louisiana University and the M.D. in 1984 at Louisiana State University. She took her residency at UMC.

Dr. Noe, who earned the B.S. in 1981 at Mississippi State University, earned the M.D. in 1985 at UMC. She took her internship and a residency at Vanderbilt University, followed by a residency at UMC.

Dr. Savole earned the B.S. in 1979 and the M.D. in 1982 at Louisiana State University. He took his internship and residency at UMC, with fellowships at the Medical College of Wisconsin and St. Luke's Hospital in Richmond, Virginia.

Dr. Ard earned the B.A. in 1972 at the University of North Carolina at Chapel Hill and the Ph.D. at the University of Connecticut. He took his postdoctoral fellowship at Washington University School of Medicine.

Dr. Davidson earned the B.S. in 1973 at the University of Illinois and the Ph.D. in 1982 at Texas Tech University. He took his postdoctoral fellowship at Purdue University. He was a research technician at Mayo Clinic from 1975-1977, and assistant research biochemist at the University of California and the Veterans Administration Medical Center at San Francisco.

MEDICAL CLINIC

For Sale or Lease

Due to retirement, physician who has been at this location since 1955 wishes to sell or lease medical clinic. All medical equipment, including lab and x-ray, furniture and fixtures included.

2000 square-foot building on 30 × 208.6 lot with parking in the rear. Prime Northeast Jackson location, convenient to area hospitals. Two consultation rooms, three exam rooms, minor surgery room, nurse's office, laboratory and x-ray. Ideal for 2 doctors.

For more information, please contact:

Mr. Jack Lowery
Deposit Guaranty National Bank
Trust Division
601-354-8118

Dr. Bloom Named Chairman Of UMC Pathology Department

Dr. Sherman Bloom has been named professor of pathology and chairman of the department at the University of Mississippi Medical Center.

Dr. Norman C. Nelson, UMC vice chancellor for health affairs, announced his July 1 appointment following approval by the Board of Trustees of State Institutions of Higher Learning.

A native of Brooklyn, New York, Dr. Bloom has been professor of pathology at George Washington University School of Medicine and Graduate School of Arts and Science since 1977. He also has held faculty appointments at New York University, University of Utah, University of California at Los Angeles Medical Center (visiting), and University of South Florida College of Medicine, where he was professor of pathology and acting chairman of the department in 1977.

Dr. Bloom has been a member of the medical staff at the University Hospital in New York, Veterans Administration Hospital and University Hospital in Salt Lake City, Utah, Veterans Administration Hospitals in Tampa, Florida, and Washington, D.C., and the George Washington University Hospital.

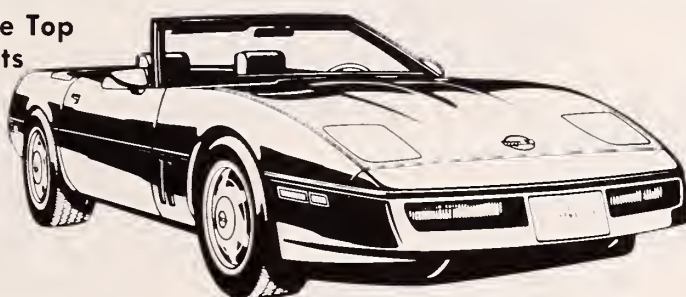
Dr. Bloom received his undergraduate degree in 1955 and the M.D. in 1960 from New York University. He took his internship at Kings County Hospital and completed a research training fellowship and residency in pathology at New York University School of Medicine and at the University and Bellevue Hospitals.

A fellow of the American College of Nutrition and the College for American Pathologists, he is founder and immediate past president of the Society for Cardiovascular Pathology and president of the Scientists Center for Animal Welfare. He holds memberships in the New York Academy of Science, American Association for the Advancement of Science, International Society for Heart Research, American Association of Pathologists, American Physiological Society, Washington Society of Pathologists and the International Academy of Pathology.

Dr. Bloom has lectured extensively in the U.S. and abroad. He has served on the editorial boards of the *Journal of the American College of Nutrition* and the *American Journal of Cardiovascular Pathology* and is the author or co-author of some 50 book chapters and journal articles and 45 abstracts and other scientific publications.

A Brand New Corvette Convertible!

White with White Top
Blue Leather Seats



~ ONLY ~
\$490⁰⁰*
per mo

MSRP \$37,612.

7.25% RATE

*Option to purchase at end of lease. 48 month closed-end, non-maintenance lease. Refundable Security Deposit may be required. Sales tax, license and insurance, plus 1st months payment due at inception. Program ends August 15, 1988.

SALES — SERVICE — LEASING

HARRELD CHEVY-OLDS

CALL TOLL-FREE!

JACKSON
354-2233

1-800-451-3908

CANTON
859-1611

UMC Scientists Receive Hypertension Society Awards

Two Jackson scientists have received the top research awards from the American Society of Hypertension.

Dr. Arthur Guyton, chairman of the Department of Physiology and Biophysics at the University of Mississippi Medical Center, received the group's William Harvey Award for contributions to hypertension research.

Dr. John Hall, professor of physiology and biophysics at UMC, received one of three Young Investigators Awards given annually by the society for excellence in research.

The 4000-member organization is made up of scientists from throughout the United States who work in some area of hypertension research. The prizes were awarded at the society's annual meeting in New York.

The work of Guyton and Hall as well as others in the UMC department has been responsible for the revision of many clinical treatments. Additionally, their work has led to a new understanding about fundamental physiological processes.

After receiving the Harvey award, Guyton addressed the assembled society delegates on the importance of the kidney in the control of blood pressure — a central theme in the work of his department.

Guyton, chairman of the department since 1955, has been recognized many times for his contributions to cardiovascular physiology. Most recently, he has received the Merck, Sharp and Dohme International Award for hypertension research, the Daggs Award from the American Physiological Society, the CIBA Award for Research in Hypertension and the Founders' Award of the Southern Society for Clinical Research. His *Textbook of Medical Physiology* is the most widely used medical textbook in the world.

Hall has been a member of the UMC faculty since 1975. He earned the Ph.D. at Michigan State University and completed a postdoctoral fellowship in the UMC department.

He received the Earnest G. Spivey Research Award from the American Heart Association, Mississippi Affiliate, and in 1984 received the American Heart Association's prestigious Goldblatt Award for his work which explained a renal-hormonal phenomenon which had not been fully understood until Hall's research.

NAVAL RESERVE PHYSICIAN

- Monthly Stipend for Physicians in training leading to qualifying as General/Orthopedic/Neurosurgeon or anesthesiologist.
- Loan repayment of up to \$20,000 for Board eligible General/Orthopedic surgeons and anesthesiologists.
- CME opportunities.
- Flexible drilling options.

*Promotion Opportunities

*Prestige

*For graduates of AMA approved
Medical Schools*

**CALL YOUR
NAVAL RESERVE FORCE
REPRESENTATIVE TODAY.**

1-800-443-6419



WE'RE ALWAYS ON CALL. 1-800-352-2226

Call the travel specialists toll-free!

When you come down with the urge or necessity to travel, call Avanti for expert service. Everything we do for you is free of charge, even the phone call.

Our travel specialists will take care of all your plans, plane reservations, car rental, hotel accommodations and much more. We're here to help you with charters, tours, cruises, personal vacations, business meetings and conventions.

The next time you make travel arrangements, remember Avanti is always on call, toll-free.

AVANTI
TRAVEL, INC.

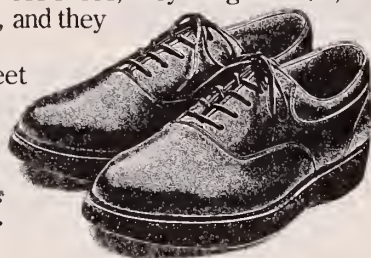
Three Lakeland Circle • Jackson, Mississippi 39216 • 981-9111
Call Toll-Free Nationwide 1-800-327-4236

CARRY LESS WEIGHT AT THE OFFICE.

The more you have on your mind, the less you should have on your feet. That's why we created DresSports®. Like other dress shoes, they look stylish. Unlike other dress shoes, they're lightweight, flexible, cushioned, and they actually feel good.

After all, your feet shouldn't slow you down on your way up.

Rockport®
Marlboro, Mass.



20% Professional Discount

Pennington's Shoes

1151 North State Street
Suite 112
Medical Arts Building
Jackson, Mississippi 39201-2407
Telephone (601) 355-7574

POSTGRADUATE CALENDAR

September

PEDIATRIC ADVANCED LIFE SUPPORT INSTRUCTOR
COURSE

Sept. 8-9

University Medical Center

NEUROSONOLOGY

Sept. 19-Oct. 1

University Medical Center

October

PEDIATRIC ADVANCED LIFE SUPPORT PROVIDER
COURSE

Oct. 13-14

University Medical Center

November

COMMUNICATIVE DISORDERS: MANAGEMENT OF THE
AGING

Nov. 4

University Medical Center

ADVANCED TRAUMA LIFE SUPPORT PROVIDER
COURSE

Nov. 10-11

University Medical Center

PEDIATRIC ANNUAL MEETING

MISSISSIPPI CHAPTER OF THE AMERICAN ACADEMY
OF PEDIATRICS

Nov. 18-19

BLAIR BATSON APPRECIATION DINNER

(A reunion of UMC faculty and residents to honor Dr. Blair Batson, professor of pediatrics and chairman of the department upon the occasion of his retirement.)

Nov. 18

University Medical Center/Ramada Renaissance
Hotel, Jackson

For more information or a program brochure, contact the University of Mississippi Medical Center Division of Continuing Health Professional Education, 2500 North State Street, Jackson, Mississippi 39216-4505; or call (601) 984-1300.

PERSONALS

GEORGE BELCHIC, JR. has associated with JOHN A. TANKSLEY of Greenville for the practice of orthopaedic surgery.

HARRY BUTLER has associated with Internal Medicine Clinic of Laurel for the practice of oncology and hematology.

W. R. CAMPBELL of Columbia and ROBERT T. CATES of Ridgeland have been recertified for membership in the American Academy of Family Physicians.

MICHAEL G. CONNER of Jackson announces that he will be assuming the practice of the late PAUL GOODE of Jackson.

RICHARD J. FIELD, JR. of Centreville attended the joint meeting of the American College of Surgeons and the Royal College of Surgeons in Ireland.

ALAN FREELAND of UMC was visiting professor at the Fort Worth Affiliated Hospitals in Fort Worth, Texas, and lectured at a meeting of the American Fracture Association in Birmingham, Alabama.

MATTHEW G. FRY has associated with RICHARD A. JOHNSON and RANDOLPH J. ROSS at the Hattiesburg Clinic for the practice of urology.

JAMES GRIFFITH of UMC presented a paper at a recent meeting of the American Psychiatric Association.

HARPER HELLEMS of UMC spoke at the regional meeting of the American College of Physicians in Natchez.

LEE HUMBLE has associated with the Street Clinic in Vicksburg for the practice of urology.

MICHAEL JABALEY of Jackson was visiting professor of hand surgery at Walter Reed Army Hospital and taught an internal fixation course in Vail, Colorado.

JOHN JACKSON of UMC spoke at the regional meeting of the American College of Physicians in Natchez.

DAVID R. KEDDY of Greenville has been recertified for membership in the American Academy of Family Physicians.



**We earn
your trust every day.™**



Trustmark
National Bank

Jackson/Bogue Chitto/Brookhaven/Canton/Clinton/Columbia
Georgetown/Gloster/Greenville/Greenwood/Hattiesburg/Hazlehurst
Leland/Liberty/Madison/Magee/McComb/Pearl/Petal/Ridgeland
Tylertown/Wesson

Member FDIC

PRINTING — OFFICE SUPPLIES

EQUIPMENT — FURNITURE



Premier Printing Company

2485 West Capitol

Jackson, Mississippi

Phone 352-4091

PERSONALS/Continued

DEBORAH C. LEE has associated with Pediatric Associates in Brandon and Clinton for the practice of pediatrics.

KEITH MANSEL of Jackson spoke at meetings of the Central Mississippi Chapter of the Lupus Foundation of America and the North Mississippi Medical Society.

STEPHEN J. MILLS and J. KIM SESSUMS announce the opening of their office for the practice of obstetrics and gynecology at 1012 Biglane Drive in Brookhaven.

TOXEY M. MORRIS of Hattiesburg has been reappointed chairman of the membership committee of the Southeastern Section of the American Urological Association.

J. ELMER NIX of Jackson has been elected secretary of the Board of Councilors for the American Academy of Orthopaedic Surgeons.

DAN NORTHEY of Hattiesburg was speaker at a continuing education program at Methodist Hospital in Hattiesburg.

JEANNETTE PULLEN of UMC chaired the infant leukemia planning committee of the Pediatric Oncology Group in Dallas, Texas.

CAROL SCOTT-CONNER of UMC has accepted a three-year appointment from the American College of Surgeons as Cancer Liaison Physician for UMC.

TATE THIGPEN of UMC spoke at the 24th congress of the South African Society of Ob-Gyn in Cape-town.

DOUGLAS F. THOMAS of Hattiesburg has been designated by the FAA as an Aviation Medical Examiner.

LARAMIE C. TRIPLETT has associated with CHARLES M. WEBBER of Madison for the practice of family medicine.

FRAZIER WARD of UMC was guest speaker at two seminars sponsored by the University of Tennessee in Memphis.

LAMAR WEEMS of UMC has been appointed a member of the American Hospital Association's committee on Medicare reform and long term care financing.

ELBERT A. WHITE, III of Corinth has been appointed by the Board of Aldermen to a five-year term on the city school board.

A. E. WOOD, JR., of Waynesboro and CHARLES H. WILLIAMS of Jackson have been recertified for membership in the American Academy of Family Physicians.

TERMS WE THINK YOU'LL LIKE...

Compare these low non-smoker annual rates for non-decreasing graded premium life:

MALE AGES	\$250,000	\$500,000	\$1,000,000
25	250.00	455.00	670.00
30	252.50	460.00	677.50
35	255.00	465.00	685.00
40	330.00	595.00	880.00
45	412.50	760.00	1,127.50
50	542.50	1,015.00	1,510.00
55	810.00	1,520.00	2,267.50
60	1,355.00	2,535.00	3,790.00
65	2,372.50	4,385.00	6,565.00

(smoker's rates slightly higher)

Renewable to age 100. Female rates same as males four years younger. All coverage provided by companies rated "A Excellent" by A.M. Best Co

For a written quotation and policy description, call or send your date of birth and amount of coverage desired to.



SCHOENFELD
FINANCIAL COMPANIES

2970 COTTAGE HILL ROAD • SUITE 201
MOBILE, ALABAMA 36606
205/471-1340

SUPPORT MEDICAL EDUCATION

Contribute to AMA-ERF

(Contact MSMA Auxiliary members about
AMA-ERF greeting cards and memorial trib-
utes.)

Medico-Legal Brief A New Credentialing Problem

Some hospital management consultants are proposing a new system for credentialing. Instead of having a credentials committee composed exclusively of physicians who are on the medical staff review credentials, membership applications would be evaluated by a special committee comprised of governing board members, and physicians appointed by the governing board. A majority of the committee would be composed of governing board members. In some instances, the physicians on the committee would not be members of the medical staff.

It would appear that the purpose of this proposal is to protect the hospital and medical staff members serving on the credentials and executive committees from the risk of anti-trust suits brought by a disgruntled physician who is denied hospital staff privileges. The hospital and medical staff would theoretically be protected because competitors would not participate in privilege decisions, thus eliminating allegations of anti-competitive motive.

Although anti-trust suits are very difficult to initiate and are rarely successful, the fear of such a

suit is made credible by *Patrick v. Burgett*, a much publicized anti-trust case that resulted in a huge judgement for a physician whose privileges were terminated after many years of practice in the hospital.

That judgement was reversed on appeal, and is now awaiting a decision by the U.S. Supreme Court. Largely in response to that case, Congress enacted the Health Care Quality Improvement Act of 1986, which provides peer review committees with qualified immunity against liability for damages, including anti-trust triple damages. Most states have long provided protection for peer review committees, but federal action was necessary to provide immunity from federal anti-trust liability.

Why are these proposals being made now when it would appear that credentialing activities already enjoy adequate legal protection? Could it be more is involved here than meets the eye? Very possibly. For after removing the medical staff from the credentialing process, hospitals may also wish to remove them from the peer review process. In fact, this suggestion already has been made.

The effect of these new proposals would be to increase governing board control over medical staffs and individual physicians. Additional control would

TOURO INFIRMARY

CENTER FOR CHRONIC PAIN AND DISABILITY REHABILITATION

- Comprehensive combined evaluation and treatment
- 4 to 5 week inpatient program
- Rehab/medication/emotional management
- Preadmission review and interview of all cases
- Accredited by the Commission on Accreditation of Rehabilitation Facilities
- Multi-specialty team selection of consultants
- Weekly reports and conferences
- Physical capacity and work evaluation
- Physician referrals
- 11 years New Orleans experience with 1,400 patients

Referrals/Info

Jackie Chauvet (504) 897-8404

R.H. Morse, M.D.

Medical Director

enable hospitals to form joint ventures and pursue diversification strategies more easily than at present.

To affect these changes is a complex task because the governing board must convince the medical staff to amend its bylaws. For the hospital cannot unilaterally amend the medical staff bylaws.

If the governing board approaches the medical staff to make major changes involving credentialing and peer review activities, the medical staff should give very careful consideration to such proposals for several reasons.

First, the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) Accreditation Standards clearly state that these activities require a "hospital specific mechanism that is approved and implemented by the medical staff and the governing board." Throughout the accreditation standards,

specific responsibilities are assigned to the medical staff with reference to credentialing, reappointment, and peer review. Medical staffs cannot abdicate these responsibilities without violating Joint Commission accreditation standards.

Second, there are many occasions when physicians must rely upon their fellow physicians on the medical staff for consultation, specialized care, or coverage. Therefore, physicians on the medical staff have an interest in participating in the credentialing and peer review of the new physicians who will be practicing in the hospital. If the medical staff does not have confidence that these physicians have been properly credentialed, it becomes very difficult to depend on them for advice and assistance.

Finally, professional evaluation by the medical staff of credentials and patient care is vital to protecting the integrity of the clinical decision making process. Protecting independent professional judgment, not making it easier to joint venture, must be the key consideration in evaluating attempts to change credentialing and peer review.

A knowledgeable and responsible governing board, working with a dedicated independent medical staff, creates the most efficient environment for good patient care. In order to preserve this environment for the benefit of patients, medical staffs must have the resources necessary to fully and properly evaluate proposals such as those discussed here. AMA has been a long time advocate of the view that medical staffs should be represented by independent legal advisors. This issue is a classic case in which the interests of the hospital and the medical staff diverge.

But the medical staff must not only have their own legal counsel; they must also have the resources necessary to maintain the integrity of the decision making process involving clinical treatment. For all these reasons, medical staffs should look skeptically at proposals to change the credentialing process; instead it should continue to play an active role in both credentialing and peer review activities.

WILLIAM B. SMITH
Office of the General Council
American Medical Association

(Ed. Note: Reprinted from the "HMSS newsletter," June 1988 — Volume 5, Number 6, page 2.)

A Commitment to Excellence in Health Care

Mississippi Emergency Association, P.A. (MEA) a physician-owned and managed group has created an environment for physicians that promotes the ideals of private practice while freeing doctors from the administrative and financial demands of the private practitioner.

Board certified or board eligible physicians in the area of Emergency Medicine, Internal Medicine, and Family Medicine are presented a variety of professional and personal rewards, including excellent salaries, benefits, and advancement opportunities.

MEA is a dynamic, growing corporation that delivers quality health care. If you would like to know what career opportunities we can offer you, send your curriculum vitae to Sheila M. Stringer or call (601) 366-6503.

**Mississippi Emergency
Association, P.A.
P.O. Box 12917
Jackson, MS 39236-2917**

Presenting a steady, tax-free income opportunity.

Mississippi State Medical Association
Endorsed by

Brought to You by

AMA ADVISERS, INC.

the Financial Services and Investment
Counseling Organization Owned by the
American Medical Association.

Specially Selected for Physicians and Their Families!

AMA Advisers, Inc. is proud to bring you a
valuable tax-free investment opportunity to help
you reach your financial objectives. It's the
Nuveen Tax-Exempt Unit Investment Trust
which offers you . . .

- **Income 100% Free of Federal Income Tax**
- **Income Free of Federal and State Income Taxes with State Trusts**
- **A Steady Cash Flow You Can Count On**
- **Attractive Returns**
- **A Choice of Insured Investments**
- **Professionally Diversified Bond Portfolios**
- **The Confidence of Credit Surveillance**
- **A Choice of Tax-Free Income Payment Options**
- **No Administrative Paperwork**
- **Complete Investor Information and Convenience!**

Confidence in NUVEEN . . . A Specialist Since 1898!

AMA Advisers chose **John Nuveen & Co. Incorporated**, a specialist in municipal bonds since 1898. Nuveen utilizes all 90 years of experience in selecting only the most credit-worthy federally tax-free bonds rated **A to AAA** by Standard & Poor's or Moody's.* Nuveen offers traditional and insured trust portfolios. Insurance guarantees the timely payment of principal and interest on the bonds in the insured trusts.** With Nuveen, you can count on . . .

- **Diversification.** Bonds in each portfolio are carefully diversified to help reduce your investment exposure.
- **Credit Surveillance.** Nuveen conducts credit surveillance on every trust portfolio until the last bond is paid.

*A portion of income may be subject to state and local taxes.

**Insurance does not offer protection against fluctuation in the market price of the units.

CALL AMA ADVISERS TOLL FREE

1-800-AMA-FUND (Ext. 2333)
(262-3863)

An AMA Advisers Investment Counselor will be happy to answer any questions you may have . . . or mail you a free Information Kit including a prospectus containing detailed information including fees and expenses. Please read the prospectus carefully before you invest or send money. If you prefer, simply complete and mail the coupon for a FREE Information Kit.

You should know that AMA Advisers' Investment Counselors are salaried to serve you. They receive no commissions when you order. Instead, a portion of the sales charge on your purchase helps to generate non-dues revenue for the American Medical Association which goes to benefit organized medicine.

Building Mutual Trust

AMA ADVISERS, INC.

The Financial Services and Investment
Counseling Organization Owned by the
American Medical Association.



Services and products as described herein are not offered in any state where they are not lawfully registered.

MS 2333



YES! Please send me a free
Information Kit on the tax-free investment
opportunities available through AMA Advisers.

Name _____

Address _____

City _____ State _____ Zip _____

Phone # (____) _____

Day ☐ Evening ☐

MAIL TO: AMA Advisers, Inc.,
P.O. Box 1923, West Chester, PA 19380-1923

PLACEMENT SERVICE

PHYSICIANS AVAILABLE

PHYSICIAN COMPLETING RESIDENCY in obstetrics and gynecology seeks practice opportunity in Mississippi. Available July 1989. Contact Greg Patton, M.D., 2325 Glenmary Avenue #2, Louisville, KY 40204.

EXPERIENCED PHYSICIAN, seeking licensure, wants position as assistant, Location flexible. P.O. Box 225, Bay Springs, MS 39422.

PHYSICIAN completing residency in general surgery, and spouse (board-eligible pediatrician) seek practice opportunities in Mississippi. Location flexible. Contact Dinesh Ranjan, M.D., 2118 Chantilla Rd., Catonsville, Md 21228.

NATIVE MISSISSIPPIAN seeking practice opportunity in Ob-Gyn. Will complete residency and be available in July 1989. Contact Walter Wolfe, M.D. 722 West Austin Dr., Peoria, IL 61614; (309) 655-2000.

PHYSICIAN completing residency in psychiatry seeks practice opportunity in Mississippi. Available July 1989. Contact DeBora Murphy, M.D., P.O. Box 53, Vahalla, NY 10595 or call (914) 592-2710.

PHYSICIANS WANTED

EMERGENCY PHYSICIANS WANTED. Part-time and full-time positions in northeast Mississippi. Call (601) 328-8385.

ORTHOPAEDIC SURGEON, UROLOGIST, ENT needed immediately for solo practice in Stuttgart, Arkansas, the Rice and Duck Hunting capital of the world. Modern hospital facilities and equipment. Family oriented community. Excellent schools. Call Jim Bushmaier at (505) 673-3511.

PHYSICIANS NEEDED in Mississippi and other southern states. All specialties needed for both rural and urban locations. Solo and multi-specialty practices available. For further information contact the Lewis Group, 1227 N. Valley Mills, Suite 200, Waco, TX 76710; phone (817) 776-4121.

STAFF PHYSICIAN, Student Health Center, Mississippi State University. M.D. or D.O. degree. Board certified or eligible (BC/BE) in primary care field. Reports to Director of Student Health Center and shares responsibilities with 3 other physicians. Salary competitive and negotiable. Limited private practice allowed. Desirable starting date August 15, 1988. Applications accepted until position is filled. Direct inquiries or applications with resume and 3 letters of reference to Dr. Gene Tice, Chair of Physician Search Committee, P.O. Box HD, Mississippi State, MS 39762. MSU is an EO/AA Employer.

PHYSICIANS desired in areas of Family Practice, Pediatrics, and Internal Medicine. Send resume to Greater Meridian Health Clinic, 2700 6th Street, Meridian, MS 39301; or call (601) 693-0151.

PHYSICIANS NEEDED

Physicians (especially specialists such as ophthalmologists, pediatricians, orthopedists, neurologists, etc.) interested in performing consultative evaluations (according to Social Security guidelines) should contact the Medical Relations Office. WATS 1-800-962-2230; Jackson, 922-6811; Martina Mayfield (ext. 2276) or Becky Ruggles (ext. 2300).



DISABILITY DETERMINATION SERVICES
1-800-962-2230

PHYSICIANS WANTED AND NEEDED: Family Practice, General Surgery, Internal Medicine, OB/GYN. Excellent living conditions, exceptional school system. Terms negotiable with community visit expenses, relocation expenses, office space, guarantee cash flow, interest free line of credit for 12 to 18 months, etc. Other opportunities available. Call or write Richard Manning, Administrator, Tyler Holmes Memorial Hospital, Tyler Holmes Drive, Winona, MS 38967, (601) 283-4114.

CLASSIFIED

SOLO SURGICAL PRACTICE closing. Office furniture, equipment and instruments for sale; LB3 colonoscope. All excellent condition. Northeast Mississippi area. Call (601) 432-9044 or (601) 432-9036.

MEDICAL OFFICE SPACE: 1000 sq. ft. office available August 1, 1988. In building with pediatric clinic in rapidly growing northwest Rankin County. Call 992-0110.

JOIN  TODAY

X-RAY MACHINE in excellent condition, medical supplies and equipment, waiting room furniture. Best offer. Call (601) 328-0830.

2V STAT STAT STAT STAT STAT STAT
Software and knowledge base for diagnoses and treatment, covering 69 different medical specialties; \$95 for demo disk. The more you know, the better you treat. The most updated medical algorithms at your fingertips! ! 2V MedTech Corporation, 2480 Windy Hill Road, Suite 201, Marietta, GA 33067. (404) 956-1855; Telex 55134/Medvideo.

Index to Advertisers

AMA Advisers	257	Pennington's Shoes	252
Avanti	251	Premier Printing	253
CancerPay Plus	230	Quality Health Resources	10
Disability Determination Service	258	Roche Laboratories	third, fourth covers
Harrel Chevrolet-Oldsmobile	249	Schoenfield Financial	254
Eli Lilly and Co.	10B	St. Stanislaus	8
Medical Assurance Co. of Miss.	second cover	Touro Infirmary	255
Miles Laboratories	6A, 6B	Trustmark	253
Miss. Emergency Association	256	U. S. Air Force	4
MSMA Benefit Plan and Trust	12	U. S. Army Reserve	10A, 226, 14
Northtowne Printers	247	U.S. Naval Reserve	250
		Jon Wimbish	6

THE ARMY RESERVE OFFERS NEW FINANCIAL INCENTIVES FOR RESIDENTS.



If you are a resident in Anesthesiology or Surgery*, the Army Reserve has a new and exciting opportunity for you. The new Specialized Training Assistance Program will provide you with financial incentives while you're training in one of these specialties.

Here's how the program can work for you. If you qualify, you may be selected to participate in the Specialized Training Program. You'll serve in a local Army Reserve medical unit with flexible scheduling so it won't interfere with your residency

training, and in addition to your regular monthly Reserve pay, you'll receive a stipend of \$644 a month.

You'll also have the opportunity to practice your specialty for two weeks a year at one of the Army's prestigious Medical Centers.

Find out more about the Army Reserve's new Specialized Training Assistance Program.

Call or write your US Army Medical Department Reserve Personnel Counselor:

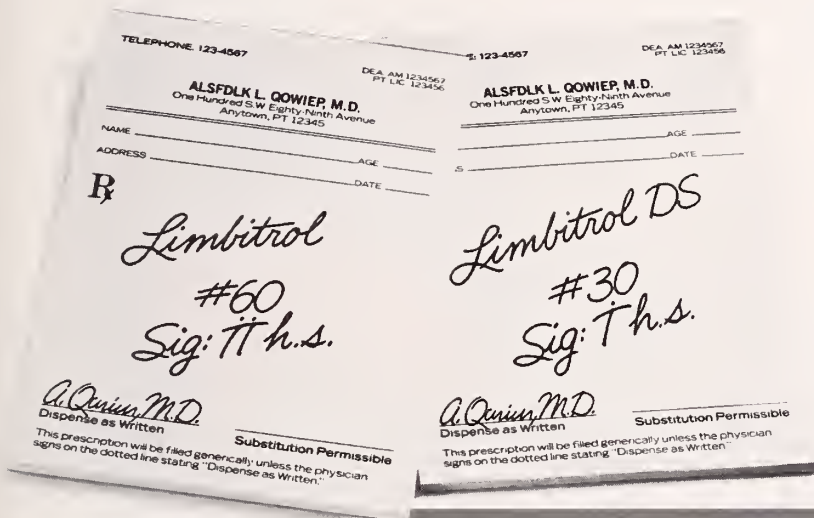
**ARMY RESERVE MEDICINE
2100 6TH AVE. SOUTH
SUITE 303
BIRMINGHAM, AL 35205
(205) 930-9719 COLLECT**

* General, Orthopaedic, Neuro, Colon/Rectal, Cardio/Thoracic, Pediatric, Peripheral/Vascular, or Plastic Surgery.

ARMY RESERVE MEDICINE. BE ALL YOU CAN BE.

In moderate depression and anxiety

- ➡ 74% of patients experienced improved sleep after the first *h.s.* dose¹
- ➡ First-week improvement in somatic symptoms¹
- ➡ 50% greater improvement with Limbitrol in the first week than with amitriptyline alone²



Protect Your Prescribing Decision:
Specify "Do not substitute."

Limbitrol[®]
Each tablet contains 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt) [Ⓢ]

Limbitrol DS[®]
Each tablet contains 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt) [Ⓢ]

References: 1. Data on file, Hoffmann-La Roche Inc., Nutley, NJ. 2. Feighner VP, et al: *Psychopharmacology* 61:217-225, Mar 22, 1979.

Limbitrol[®]

Tranquilizer—Antidepressant

Before prescribing, please consult complete product information, a summary of which follows:

Contraindications: Known hypersensitivity to benzodiazepines or tricyclic antidepressants; concomitant use with MAOIs or within 14 days of monoamine oxidase inhibitors (then initiate cautiously, gradually increasing dosage until optimal response is achieved); during acute recovery phase following myocardial infarction.

Warnings: Use with caution in patients with history of urinary retention or angle-closure glaucoma. Severe constipation may occur when used with anticholinergics. Closely supervise cardiovascular patients. Arrhythmias, sinus tachycardia, prolongation of conduction time, myocardial infarction and stroke reported with tricyclic antidepressants, especially in high doses. Caution patients about possible combined effects with alcohol and other CNS depressants and against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving).

Usage in Pregnancy: Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations. Consider possibility of pregnancy when instituting therapy.

Withdrawal symptoms of the barbiturate type have occurred after discontinuation of benzodiazepines (see Drug Abuse and Dependence).

Precautions: Use cautiously in patients with a history of seizures, in hyperthyroid patients, those on thyroid medication, patients with impaired renal or hepatic function. Because of suicidal ideation in depressed patients, do not permit easy access to large quantities of drug. Periodic liver function tests and blood counts recommended during prolonged treatment. Amitriptyline may block action of guanethidine or similar antihypertensives. When tricyclic antidepressants are used concomitantly with cimetidine (Tagamet), clinically significant effects have been reported involving delayed elimination and increasing steady-state concentrations of the tricyclic drugs. Use of Limbitrol with other psychotropic drugs has not been evaluated; sedative effects may be additive. Discontinue several days before surgery. Limit concomitant administration of ECT to essential treatment. See Warnings for precautions about pregnancy. Should not be taken during the nursing period or by children under 12. In elderly and debilitated, limit to smallest effective dosage to preclude ataxia, oversedation, confusion or anticholinergic effects. Inform patients to consult physician before increasing dose or abruptly discontinuing this drug.

Adverse Reactions: Most frequent: drowsiness, dry mouth, constipation, blurred vision, dizziness, bloating. Less frequent: vivid dreams, impotence, tremor, confusion, nasal congestion. Rare: granulocytopenia, jaundice, hepatic dysfunction. Others: many symptoms associated with depression including anorexia, fatigue, weakness, restlessness, lethargy.

Adverse reactions not reported with Limbitrol but reported with one or both components or closely related drugs: **Cardiovascular:** Hypotension, hypertension, tachycardia, palpitations, myocardial infarction, arrhythmias, heart block, stroke. **Psychiatric:** Euphoria, apprehension, poor concentration, delusions, hallucinations, hypomania, increased or decreased libido. **Neurologic:** Incoordination, ataxia, numbness, tingling and paresthesias of the extremities, extrapyramidal symptoms, syncope, changes in EEG patterns. **Anticholinergic:** Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract. **Allergic:** Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus. **Hematologic:** Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia. **Gastrointestinal:** Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, black tongue. **Endocrine:** Testicular swelling, gynecomastia in the male, breast enlargement, galactorrhea and minor menstrual irregularities in the female, elevation and lowering of blood sugar levels, and syndrome of inappropriate ADH (antidiuretic hormone) secretion. **Other:** Headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, jaundice, alopecia, parotid swelling.

Drug Abuse and Dependence: Withdrawal symptoms similar to those noted with barbiturates and alcohol have occurred following abrupt discontinuance of chlordiazepoxide; more severe seen after excessive doses over extended periods; milder after taking continuously at therapeutic levels for several months. Withdrawal symptoms also reported with abrupt amitriptyline discontinuation. Therefore, after extended therapy, avoid abrupt discontinuation and taper dosage. Carefully supervise addiction-prone individuals because of predisposition to habituation and dependence.

Overdosage: Immediately hospitalize patient. Treat symptomatically and supportively. I.V. administration of 1 to 3 mg physostigmine salicylate may reverse symptoms of amitriptyline poisoning. See complete product information for manifestation and treatment.

How Supplied: Double strength (DS) Tablets, white, film-coated, each containing 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt), and Tablets, blue, film-coated, each containing 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt)—bottles of 100 and 500; Tel-E-Dose[®] packages of 100; Prescription Paks of 50.



ROCHE PRODUCTS INC.
Manati, Puerto Rico 00701

In the depressed and anxious patient

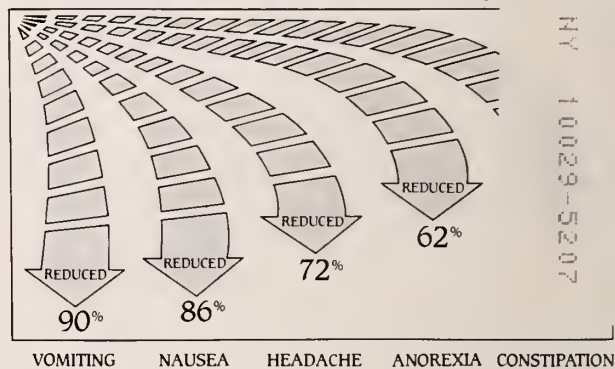
See Improvement In The First Week¹

And The Weeks That Follow

- ➡ 74% of patients experienced improved sleep after the first *h.s.* dose¹
- ➡ First-week reduction in somatic symptoms

Caution patients about the combined effects of Limbitrol with alcohol or other CNS depressants and about activities requiring complete mental alertness, such as operating machinery or driving a car. In general, limit dosage to the lowest effective amount in elderly patients.

Percentage of Reduction in Individual Somatic
During First Week of Limbitrol Therapy



*Patients often presented with more than one somatic symptom.

Limbitrol[®]

Each tablet contains 5 mg clordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt) (N)

Limbitrol[®] DS

Each tablet contains 10 mg clordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt) (N)

Copyright © 1988 by Roche Products Inc. All rights reserved.
Please see summary of product information inside back cover.

N.Y. ACADEMY OF MED
222 E 103RD ST
NEW YORK NY 10029-5207



JOURNAL

OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION

SEPTEMBER

1988



In this issue:

**The Treatment of Somatizing Patients
Extravasation from the Upper Urinary Tract**

There is strength in numbers. *(And our numbers are growing.)*



Seated, Left to Right: Cheryl Maxwell (Claims Secretary), Lisa Noble (Underwriting Secretary), Maria Graham (Claims Secretary), Kim Ormond (Receptionist), Mike Houpt (General Manager), and C.G. "Tanny" Sutherland, M.D. (Medical Director)

Standing, Left to Right: C.R. "Bob" Montgomery (General Counsel), Lisa Stewart (Underwriting Secretary), Sharon Thompson (Claims Secretary), Craig Brown (Underwriting Manager), Joey Grimes (Controller), Chuck Dunn (Assistant General Manager), and Debbie Sutherland (Bookkeeper)

Since we wrote our first policy in November of 1977, we have grown to serve more physicians than any other medical liability insurance company in Mississippi.

Why do more physicians turn to Medical Assurance Company? Our staff has grown from two in 1978 to five in 1983 to twelve in 1988, and we have plans for additional staff even now. We have insurance professionals who can provide efficient and cost-effective

answers to your medical liability insurance questions. We serve more than 1800 Mississippi doctors – providing savings and financial strength through a program of sound investments and underwriting guidelines. Every claim is reviewed by a panel of medical and legal claims experts.

So call or come visit our staff at our offices on Riverside Drive. Let us show you *our* strength in numbers.



Medical Assurance Company of Mississippi

Street Address: Suite 301
735 Riverside Drive, Jackson, MS
Phone: (601) 353-2000

Mailing Address: P.O. Box 4915, Jackson, MS 39216-0915
MS WATS: 1-800-325-4172

JOURNAL

OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION

SEPTEMBER 1988

VOLUME XXIX

NUMBER 9

SCIENTIFIC

- The Treatment of Somatizing Patients** 259

James L. Griffith, M.D.

- Extravasation from the Upper Urinary Tract:** 269

Three Case Reports

*John P. Elliott, M.D., James O. Gordon, M.D.,
John W. Evans, M.D., Lucas O. Platt, M.D.,
and William Hughes Milam, M.D.*

EDITORIALS

- Relative Values Need Relative Views** 272

David R. Steckler, M.D.

- The Positive Approach** 273

George E. Abraham, II, M.D.

DEPARTMENTS

- News** 276

- Medico-Legal Brief** 273

- Letters** 275

- Personals** 287

- New Members** 283

- Placement Service** 295

EDITOR

Myron W. Lockey, M.D.

EDITOR EMERITUS

W. Moncure Dabney, M.D.

ASSOCIATE EDITORS

George E. Abraham, M.D.

Joseph E. Johnston, M.D.

MANAGING EDITOR

Patsy Silver

PUBLICATIONS COMMITTEE

Richard C. Miller, M.D.,

Chairman

George H. Martin, M.D.

William J. Gibson, M.D.

and the editors

THE ASSOCIATION

David R. Steckler, M.D.

President

J. Ed Hill, M.D.

President-Elect

Don Q. Mitchell, M.D.

Secretary-Treasurer

James C. Waites, M.D.

Speaker

H. Vann Craig, M.D.

Vice Speaker

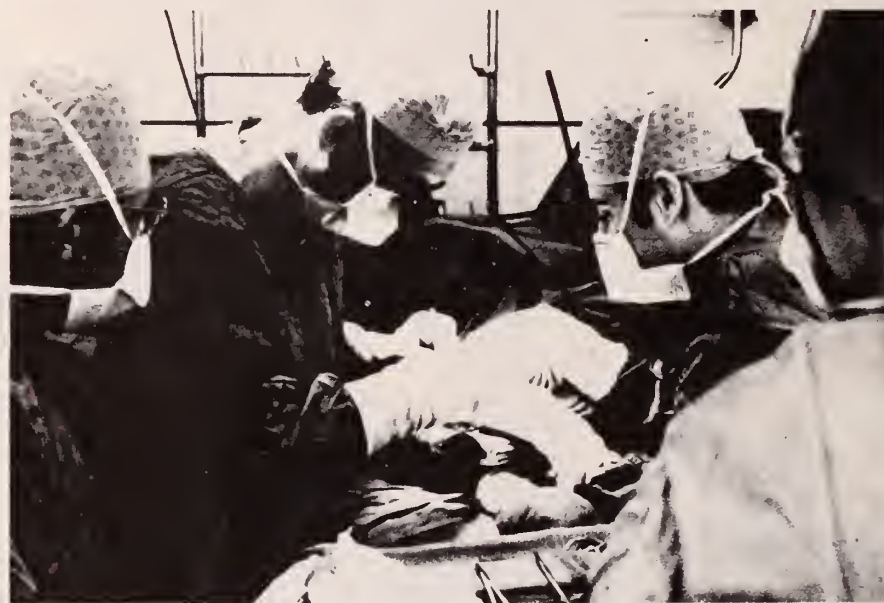
Charles L. Mathews

Executive Director

Copyright© 1988, Mississippi State Medical Association. The views expressed in this publication reflect the opinions of the authors and do not necessarily state the opinions or policies of the Mississippi State Medical Association.

THE JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION (ISSN 0026-6393) is owned and published monthly by the Mississippi State Medical Association, founded 1856, at 735 Riverside Drive, Jackson, Mississippi 39202. Subscription rate, \$25.00 per annum; \$35.00 per annum for foreign subscriptions; \$2.25 per copy, as available. Advertising rates furnished on request. Printed by The Ovid Bell Press, Inc., Fulton, Missouri. Second-class postage paid at Jackson, Mississippi, and at additional mailing offices. POSTMASTER: Send address changes to Mississippi State Medical Association, P.O. Box 5229, Jackson, Mississippi 39216.

THE ARMY RESERVE OFFERS NEW FINANCIAL INCENTIVES FOR RESIDENTS.



If you are a resident in Anesthesiology or Surgery*, the Army Reserve has a new and exciting opportunity for you. The new Specialized Training Assistance Program will provide you with financial incentives while you're training in one of these specialties.

Here's how the program can work for you. If you qualify, you may be selected to participate in the Specialized Training Program. You'll serve in a local Army Reserve medical unit with flexible scheduling so it won't interfere with your residency

training, and in addition to your regular monthly Reserve pay, you'll receive a stipend of \$678 a month.

You'll also have the opportunity to practice your specialty for two weeks a year at one of the Army's prestigious Medical Centers.

Find out more about the Army Reserve's new Specialized Training Assistance Program.

Call or write your US Army Medical Department Reserve Personnel Counselor:

**ARMY RESERVE MEDICINE
2100 16th AVE. SOUTH
SUITE 303
BIRMINGHAM, AL 35205
(205) 930-9719 COLLECT**

* General, Orthopaedic, Neuro, Colon/Rectal, Cardio/Thoracic, Pediatric, Peripheral/Vascular, or Plastic Surgery.

ARMY RESERVE MEDICINE. BE ALL YOU CAN BE.

NEWSLETTER

September 1988

Dear Doctor:

The number of reported mumps cases in the U.S. has more than quadrupled since 1985 after a 20-year decline, and the age of those affected has shifted upward. A report in the September 9 issue of JAMA describes the first documented mumps outbreak in the workplace -- 119 cases seen among employees at three Chicago futures exchanges and their household contacts.

The report, from the Centers for Disease Control, says that 21 of the patients developed complications, nine were hospitalized, and the direct and indirect economic costs associated with the outbreak totaled nearly \$121,000. The report notes that a cohort of adolescents and young adults "underimmunized against mumps and underexposed to disease" is now entering the work force.

The national increase in the occurrence of mumps cases, along with an increase in this state, prompted the Mississippi State Board of Health, at its July 13 meeting, to make mumps a Class II reportable disease. The Board also made three other changes in reportable diseases: (1) human immunodeficiency virus infection was designated a Class II reportable condition, (2) acute rheumatic fever was designated a Class II reportable condition and (3) occupational illness or injury was removed from the list of reportable conditions. The new reporting requirements took effect August 12. Retroactive reporting of cases is not required.

The Health Department is instituting routine partner notification on patients identified within the health department setting as infected with HIV. Designating HIV infection as a reportable condition will enable follow-up to be carried out on patients identified in the private sector as well. The department will follow procedures enabling notification of partners while protecting confidentiality.

Sincerely,



Patsy Silver
Managing Editor

Who would say something nice about a bill collector?

Over 1,200 professional and trade associations, including yours.

It's true. The bill collecting services of I.C. System have been endorsed by over 1,200 associations around the country, including the one you belong to.

We're proud of these endorsements. We've made a concerted effort to bring high standards of professionalism, ethics, and effectiveness to the collection process. We believe we've succeeded and, apparently, your association agrees.

So if you've been billing people who aren't paying you, now you know who to contact.

Although we're headquartered in St. Paul, Minnesota, we have communication centers in every state of the union. We'll assign a local I.C. representative to your account who will be supported by a full range of collection services and

personnel, including carefully-trained telephone contact specialists. We'll even provide initial training on how to use our service for the person(s) in your office handling accounts receivable.

But most important, we *guarantee* results. Our fee structure combines a very competitive commission rate with a retainer (corporate or standard) scaled to your needs. And we guarantee to keep collecting for as long as it takes to recover *at least ten times the amount of that retainer*.

To find out how the I.C. System approach can work for you, call toll free (800) 824-9469, ext. 330. In Minnesota, call (612) 483-8201, ext. 330. Or return the coupon.



I want to recover the money that's owed me. Please provide me with information on the I.C. System approach.

Name _____

Title _____

Firm _____

Address _____

City _____ State _____ Zip _____

Telephone number _____

Mail to: I.C. System, Inc., 444 East Highway 96, P.O. Box 64639, St. Paul, Minnesota 55164-0639

**You're
a Professional.**

**You need Professional
Health Insurance
Coverage.**

MSMA

Benefit Plan and Trust

MSMA Benefit Plan and Trust is a superior insurance program which fulfills the quality of coverage and affordability that everyone wants.

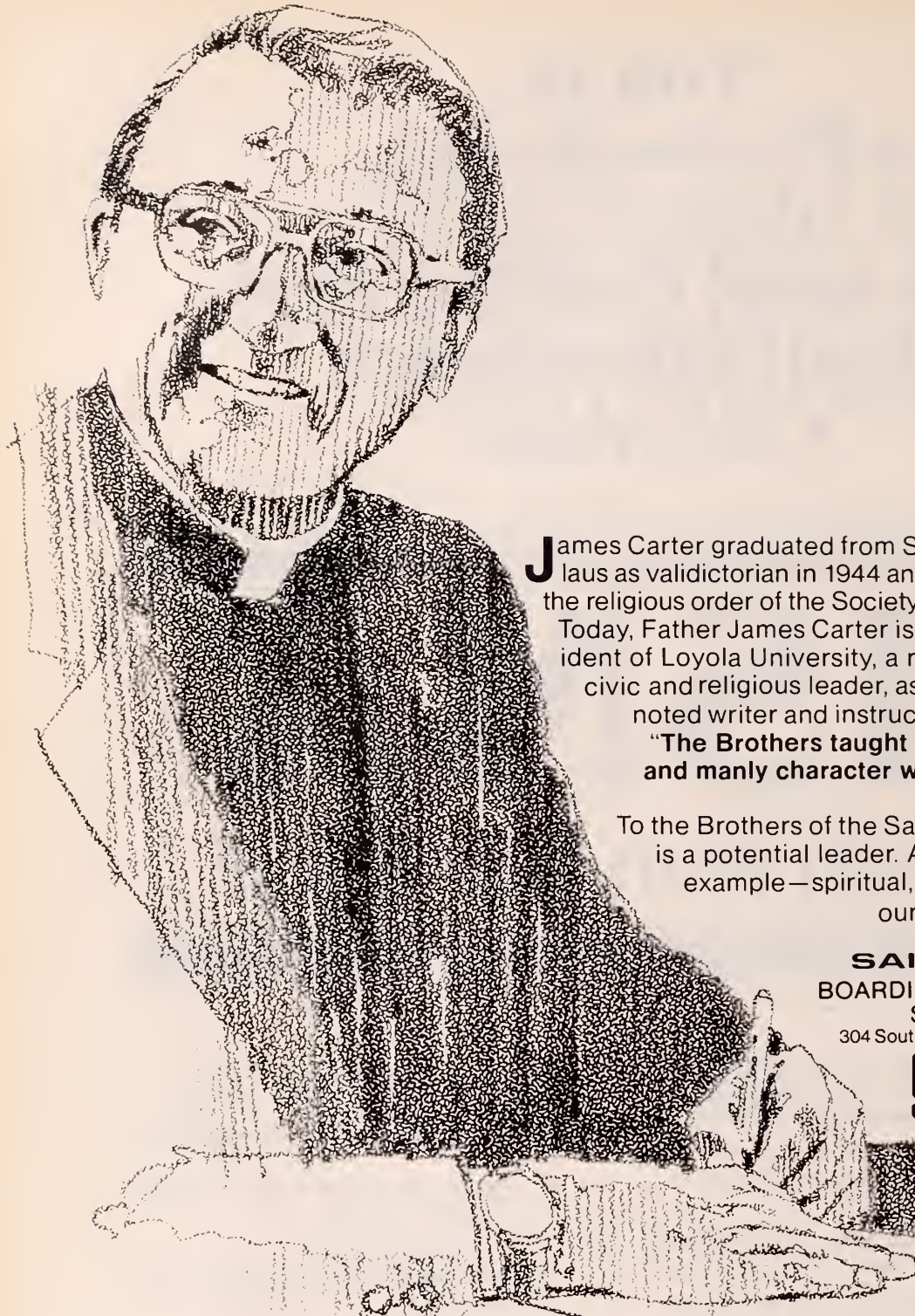
Sponsored by the Mississippi State Medical Association, the MSMA Benefit Plan and Trust offers life and health benefits to physician members of MSMA, their employees and families.

- \$1,000,000 lifetime benefits.
- Life Coverage up to \$50,000.
- Broad benefits with fair and equitable rates.
- Management by and for physicians.
- Non-profit and administered at lowest possible cost.

For Complete Description of Benefits Write:

MSMA Benefit Plan and Trust

P.O. Box 55509
Jackson, MS 39216



James Carter graduated from St. Stanislaus as validictorian in 1944 and entered the religious order of the Society of Jesus. Today, Father James Carter is the president of Loyola University, a respected civic and religious leader, as well as a noted writer and instructor in the field of science. **"The Brothers taught us a blend of simple piety and manly character which is the trademark of a Stanislaus education."**

To the Brothers of the Sacred Heart, every student is a potential leader. And giving him the proper example—spiritual, intellectual and moral—is our mission at St. Stanislaus.

SAINT STANISLAUS
BOARDING SCHOOL GRADES 6-12
SUMMER CAMP AGES 9-14
304 South Beach Blvd. Bay St. Louis, MS 39520



St. Stanislaus helps build leaders.

FOR A FREE BROCHURE CALL THE DIRECTOR OF ADMISSIONS—(601) 467-9057.

DATELINE

Judge Criticizes Medicare Home Health Rules

Washington, DC - A federal judge has ruled that Medicare is illegally denying benefits to elderly people requiring home health care. Medicare now restricts home health care to no more than four visits. A beneficiary needing five hours of care is denied coverage if the care extends over five days, while a beneficiary requiring 27 hours of care may qualify if the care is spread over only four days, the judge noted.

Minnesota Initiates Plan To Assist Needy Children

Chicago, IL - "AM News" reports Minnesota has launched a program to fund a child health insurance program expected to benefit nearly 100,000 children who fall through the cracks in the Medicaid system. The program, which will pay for eyeglasses, prescriptions, physician and dentist visits, immunizations and x-ray services, is funded by a one-cent surtax on cigarettes. Four other states have similar programs.

Poster on Tanning Risks Available from FDA

Rockville, MD - An FDA poster on tanning risks is available for office display. The free poster carries the headline "The Darker Side of Indoor Tanning" and advises: "If you choose to tan in spite of the risks, always wear goggles; know if your medicines make you extra sensitive to light; know your skin type; don't overexpose." Order #FDS 87-8270 from FDA (HFE-88), 5600 Fishers Lane, Rockville, MD 20857.

AMA Plans Adolescent Mental Health Conference

Chicago, IL - In an effort to gain a better understanding of what drives millions of adolescents to drug abuse, violence and suicide, the AMA is sponsoring a national Adolescent Mental Health Conference October 7-8 at Oak Brook, IL. Topics include sexuality, AIDS, homicide and gangs, suicide, runaways and the homeless, family violence, substance abuse, eating disorders. For information call 312/645-4526.

Clonidine Helps Smokers Kick the Habit

Chicago, IL - Transdermal administration of clonidine appears to help smokers kick the habit by reducing craving for cigarettes. A report in the September Archives of Internal Medicine says that in a double-blind, placebo-controlled study involving 40 smokers, the patients receiving transdermal clonidine experienced fewer withdrawal symptoms such as craving, irritability, anxiety, restlessness and hunger.

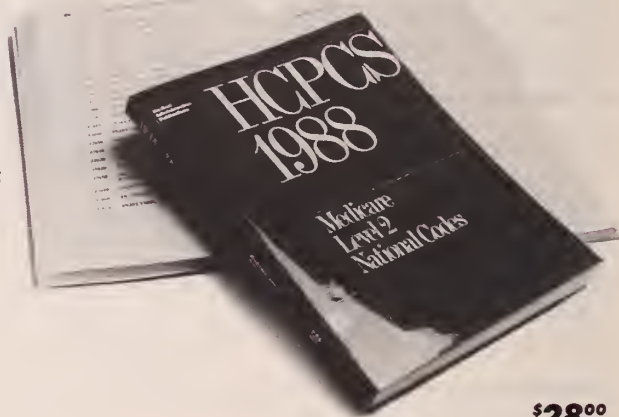
Do You Have HCPCS Disease?

Definition: HCPCS (hic piks)—HCFA's (Health Care Financing Administration) Common Procedure Coding System

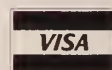
Symptom: Rejected and underpaid claims from Medicare and Medicaid

Rx: You need PRN—codes required by Medicare and Medicaid for supplies and injections not contained in CPT

- **Injections**
- **Medical and surgical supplies**
- **Medicare modifiers**
- **Chemotherapy drugs**
- **Rehabilitation services**
- **Dialysis**
- **Enteral and parenteral therapy**
- **Orthotic and prosthetic procedures**
- **And much more!**



\$28⁰⁰



To Order, Call Now 1-800-624-6994

Medical Administration Publications
671 Executive Drive
Willowbrook, IL 60521
312/654-1666



Counsel to Authors

THE JOURNAL welcomes manuscripts which should be submitted to the Editors at 735 Riverside Drive, Jackson, MS 39216, in original and at least one duplicate copy. They must be typewritten double spaced on 8½ by 11-inch white paper. **Brief manuscripts (about 2,500 words or 8 pages) will be given preference over longer articles.**

The author is responsible for all statements made in his work, including changes made by the manuscript editor. Manuscripts are received with the understanding that they are not under simultaneous consideration by any other publication and have not been previously published. All manuscripts will be acknowledged, and while those rejected are generally returned to the author, the JOURNAL is not responsible in event of loss. Manuscripts accepted for publication become the property of the JOURNAL and are copyrighted by the association when published. They may not be published elsewhere without written release and permission from both the JOURNAL and the author.

All copy must be double spaced, including legends, footnotes, and references. Generous margins at the top, bottom, and on both sides of the page should be allowed. Each page after the title page should be consecutively numbered and carry a running head identifying the paper and author.

Titles should be short, specific, and clear. Ordinarily, a title should not exceed 80 characters, including punctuation.

References should be limited to a maximum of 10. If there are more than 10, the references will be omitted and a notation made to write the author for a complete list. Textbooks, personal communications, and unpublished data may not be cited as references. References must include names of authors, complete title cited, name of journal or book spelled out or abbreviated according to the *Index Medicus*, volume number, first and last page numbers, month, date (if published more frequently than monthly), and year. References should be arranged according to order listed in the text and must be numbered consecutively.

Manuscripts accepted for publication are subject to copy editing. Authors will receive galley proof prior to publication. Galley proof is only for correction of errors, and text changes

may not be made. The galley proof should be returned by the author within 48 hours from receipt, and no further changes may be made.

Illustrations consist of all material which cannot be set into type such as photographs, line drawings, graphs, charts, and tracings. Illustrations should be submitted separately from text copy. Figures and drawings should be professionally prepared with black ink on white paper. Photographs should be of high resolution, unmounted, untrimmed, glossy prints. Each must be clearly identified. No charges are made to authors for up to four illustration engravings. More are not permitted unless voted on by two editors and extra costs must be absorbed by the author.

Illustrations must be numbered and cited in the text. Legends, not exceeding 40 words and preferably shorter, must accompany each illustration, typed double spaced on separate sheets. The following information should appear on a gummed label affixed to the back of each illustration: Figure number, manuscript title, author's name, and arrow indicating top of the illustration.

In photographs in which there is any possibility of personal identification, an acceptable legal release must accompany the material.

A thesis summary of 75 to 100 words must accompany each manuscript.

Reprints may be obtained at cost plus shipping charges from the association and **should be ordered prior to publication.** The JOURNAL reserves the right to decline any manuscript. Authors should avoid placing subheads in the text, and the Editors reserve the prerogative of writing and inserting subheads according to JOURNAL style. — *The Editors.*

In addition, in view of *The Copyright Revision Act of 1976*, effective Jan. 1, 1978, transmittal letters to the editor should contain the following language: "In consideration of the Mississippi State Medical Association's taking action in reviewing and editing my submission, the author(s) undersigned hereby transfers, assigns, or otherwise conveys all copyright ownership to the MSMA in the event that such work is published by the MSMA." We regret that transmittal letters not containing the foregoing language signed by all authors of the submission will necessitate delay in review of the manuscript. — *The Editors.*

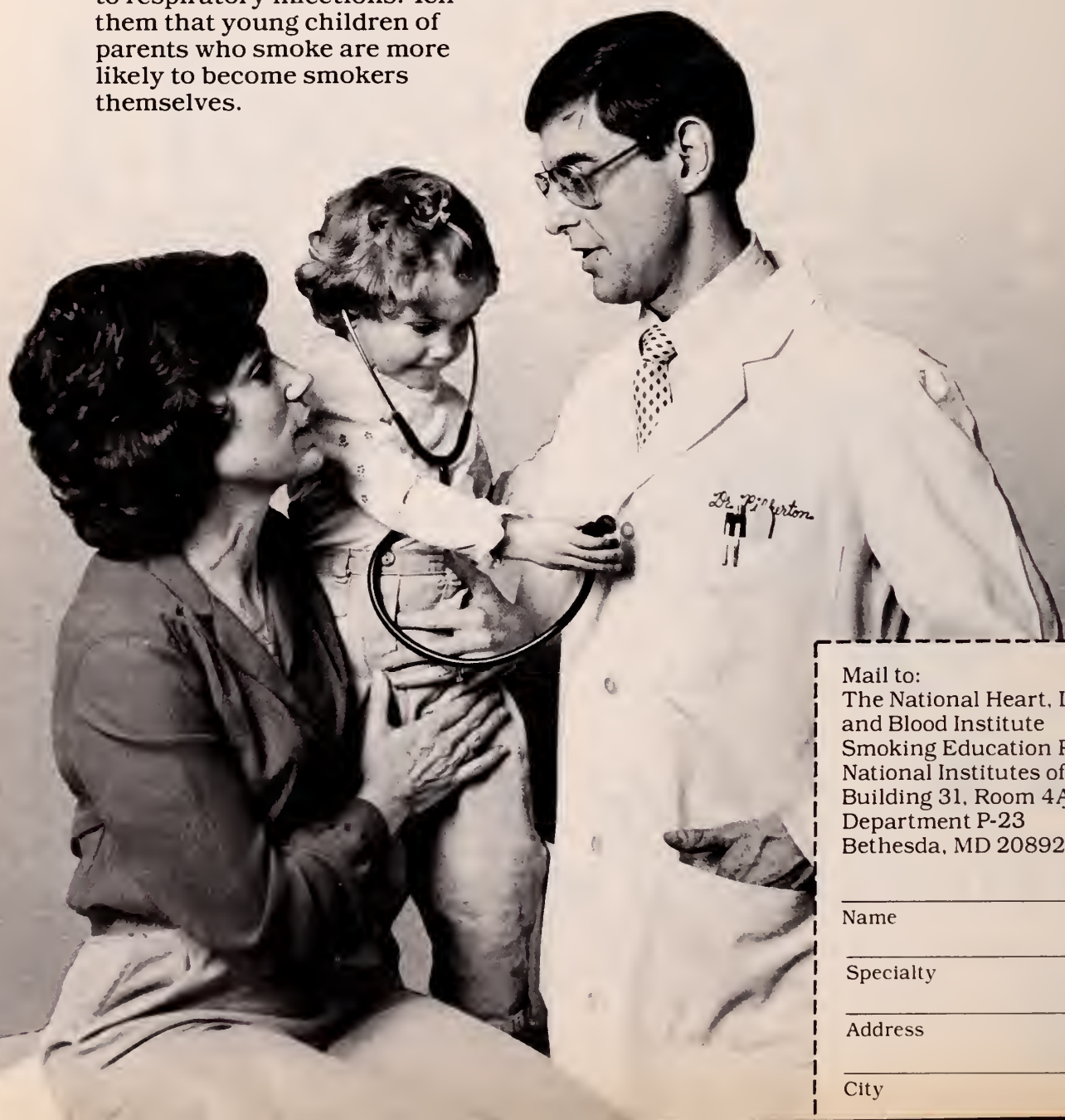
A Clinical Opportunity for Smoking Intervention

You can play a special role in reaching smokers. Encouraging parents not to smoke can improve the health of the entire family.

Take a few minutes to explain that children of parents who smoke are often more prone to respiratory infections. Tell them that young children of parents who smoke are more likely to become smokers themselves.

The minutes you spend can make a difference now, and in the years ahead.

For a free copy of *Clinical Opportunities for Smoking Intervention: A Guide for the Busy Physician*, complete the form below.



Mail to:
The National Heart, Lung, and Blood Institute
Smoking Education Program
National Institutes of Health
Building 31, Room 4A 18
Department P-23
Bethesda, MD 20892

Name

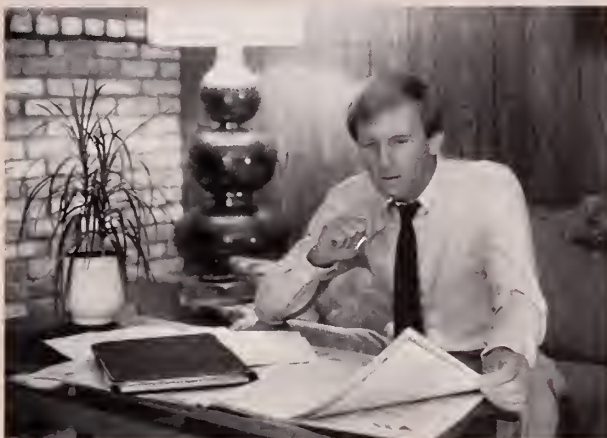
Specialty

Address

City

Rather Spend Time Doing Other Things?

Endorsed by
Mississippi State Medical Association



AMA Advisers MONEY MASTER

It's The One Account For All Your Money Management Needs!

The **AMA Advisers Money Master Account** is a state-of-the-art financial management system for managing your assets, investments, savings, expenses – even your insurance! With **Money Master**, you'll discover how easy personal finance can be and how much time you can save to do the things you'd rather do.

AMA Advisers Money Master Account simplifies financial management with:

- **Your Own Budget Analysis...** through the use of coded checks you'll see your monthly expenses sorted and totaled into one of 37 pre-set categories such as insurance premiums, charitable contributions, education, utilities, vacation and many more. Great for personal or professional budgeting!
- **Discount Brokerage Services...** that enable you to trade stocks, bonds, government securities, options and of course, mutual funds.
- **One Monthly Statement for ALL Your Investments.** In addition to investments made through your **AMA Advisers Money Master Account**, simply supply us with the appropriate information and for your convenience, we'll track your investments, even those made through other brokers or mutual fund organizations. All that you tell us about will be shown on your **Money Master Account** statement.

- **Special Year-End Statement Practically Completes Your Tax Return For You!** At year end, you'll receive a statement so complete that it even shows the proper tax schedule to use for filing your return! All you do is transfer the information to the form.

- **High Money Market Returns On Your Checking Account!** You earn money market rates on all the money in your account until the day your check clears, since an **AMA Money Fund Account** is opened through the **Money Master Account**.

If you would like convenience of a **Money Master Account**,
CALL TOLL FREE: 1-800-AMA-FUND
(262-3863) Ext. 2327 TODAY!

Or, complete and mail the coupon. You'll receive a complete **Money Master Account** Information Kit with an application to open the one account for all your investment needs. An **AMA Money Fund** prospectus will be included for complete details on fees and expenses relating to the fund. Please read the prospectus carefully before you invest or send money.

Building Mutual Trust



AMA ADVISERS, INC.

AMA Advisers, Inc. is a subsidiary of the American Medical Association and manages the mutual funds in The AMA Group.

Services and products as described herein are not offered for sale in any state where they are not lawfully registered.

MS 2327

MAIL TO: AMA ADVISERS, INC.,
P.O. BOX 1923, WEST CHESTER, PA 19380-1923

☒ **Yes! Send me a FREE AMA Advisers Money Master Account Information Kit.**

NAME _____

ADDRESS _____

CITY _____

STATE _____ ZIP CODE _____

PHONE # (_____) _____ Day ☐ Evening ☐
Area Code

AIM HIGH

A PRESCRIPTION FOR PHYSICIANS

BOTHERED BY:

- ★ Too much paperwork?
- ★ The burden of office overhead?
- ★ Malpractice insurance costs?
- ★ Not enough time for the family?
- ★ No time to keep current with technology and new methods?
- ★ No time or money for professional development?

JOIN THE AIR FORCE MEDICAL TEAM; WE'LL PROVIDE THE FOLLOWING:

- ★ Competent and dedicated professional staff.
- ★ Time for patients and for keeping professionally current.
- ★ Financial security, a generous retirement for those who qualify.
- ★ If qualified, unlimited professional development.
- ★ Medical facilities all around the world.
- ★ 30 days of vacation with pay each year.
- ★ Complete medical and dental care.
- ★ Low cost life insurance.

Want to find out more? Contact your nearest Air Force recruiter for information at no obligation. Call

**SSgt Jauregui
(901)278-6349**

**Collect or
1-800-423-USAF Toll Free**



ORIGINAL PAPERS

The Treatment of Somatizing Patients

JAMES L. GRIFFITH, M.D.

Jackson, Mississippi

Mrs. M. WAS 51 YEARS OLD, gaunt and exceedingly proper, when she came to my office as a referral for her intractable headaches. Consecutive efforts by two very competent neurologists had failed to make headway with her headaches. One of them had persuaded her, against her better judgement, to see a psychiatrist who might have more success. He had warned me of what was to come; he had finally referred her away after discovering that she had during the previous five months purchased, using prescriptions from several different doctors, more than a thousand dollars of various headache medications. Although this clearly seemed to be an addictive pattern, most of the medications were in fact nonnarcotics.

Mrs. M. gave a clipped, finely detailed account of the vicissitudes of her headaches, how they were set off when the temperature went up, when the temperature went down, when she became hungry or saw bright lights or ate any of a long list of foods. It was apparent within a few moments that she was an angry person most of the time, usually directing her resentment towards her husband whom she described as a ne'er-do-well. After eliminating affective, anxiety, and medical disorders as likely etiologies for her headaches, I talked with her about the psychophysiology of pain, how chronic frustration through limbic system activation can so overdrive background muscle tone and the autonomic nervous system that pain and other psychosomatic symptoms (several of which she also had) were predictable sequellae. I needed to see her with her husband to

Somatizing patients are physically well patients whose symptoms of illness are emotionally determined. The author notes that they are a major source of frustration for many physicians in medical or surgical practice, particularly when they insist upon medical, rather than psychiatric, treatment for their complaints. He points out that the nonpsychiatric physician can successfully treat many somatizing patients. He notes that although psychiatric consultation may often be needed, many patients with primary somatoform disorders benefit most when continued in treatment by a nonpsychiatric physician who: (1) teaches the patient about the relationship between their symptoms and life stress, (2) strictly limits marginally or nonindicated medical tests and treatments requested by the patient, (3) maintains regular, consistent contact with the patient, whether sick or well.

work with them on the source of her chronic anger. She agreed with the formulation, but I could not see her husband — he had never changed in 30 years and she was not going to get angry again by trying again. As I was insistent, we were at a stand-off. Eventually, I struck a deal with her — I would not insist on meeting her husband if simpler measures worked. I then did some of the things, such as raise her Inderal dose, which my neurological colleagues had already tried, and she began reporting remarkable improvement. This strategy continued

From the Department of Psychiatry and Human Behavior, University Medical Center, Jackson, MS.

to work for several months; she continued to report improvement in her headaches so long as I would stay away from her husband.

I only saw Mrs. M. a few times, although it seemed there were scores of telephone calls in between appointments. Then there came a time when she began calling more frequently, reporting symptoms, complaining about the treatment, and asking for stronger medications. When I held firm she left, I suppose to find another doctor who would not be so complicated to deal with.

Patients like Mrs. M. are maddening to most physicians. Mrs. M.'s behavior seemed like a deliberate attempt to create misery for her doctor, and the more so if the doctor were attempting to practice internal medicine or general surgery rather than psychiatry.

Mrs. M. had a somatoform disorder, specifically Somatoform Pain Disorder, and, as is often the case with the somatoform disorders, an accompanying personality disorder.¹ Somatoform disorders are common in the general practice of medicine, accounting for up to a fourth of all patient visits in a family medicine practice where the more troublesome patients are known as "crocks," "turkeys," and "hysterics."² Why do somatoform patients exaggerate, imagine, obsess over physical symptoms for which there seems to be no basis in physiological reality? Do they deliberately intend the frustration they create for their doctors? If their inner suffering from their perceived illnesses is authentic, then what can be done to relieve the suffering if not cure the illness? This article will offer a way for understanding and classifying somatoform patients and some treatment guidelines for the nonpsychiatric physician.

A patient who *somatizes* uses his or her body for psychological purposes or for personal gain by reporting physical symptoms which are not directly related to a disease process.³ A person who somatizes as a primary means for coping with life has a *somatoform disorder*.^{1,3} Some persons who have genuine organic disease may also use their disease for psychological purposes. The presence of genuine underlying disease therefore does not rule out somatizing behavior.

Current psychiatric nomenclature describes five prototype somatoform disorders with formal diagnostic criteria.¹ While some of the names of the disorders may be unfamiliar to a physician in general medical practice, the patients themselves are intimately familiar to every experienced physician. These are patients with psychiatric disorders who diligently avoid the psychiatrist's office, typically insisting upon treatment from their family physi-

cian, internist, gynecologist, or general surgeon, appearing in the offices of every type of medical practice.

Types of Somatoform Disorders

The types of somatoform disorders are:¹

1. *Body Dysmorphic Disorder* — The patient bears a deep, unchanging conviction that his or her body is in some way flawed in its appearance. The conviction cannot be easily swayed by reassurance or evidence to the contrary.

Jill D. was a 23-year-old female who visited a plastic surgeon complaining that her nose was too large. She spent hours with makeup to alter the appearance of her facial contours before venturing into public places, and she was convinced that boys would never be attracted to her with her nose so large. The plastic surgeon attempted to reassure her that her nose was in no way unattractive and even showed her photographs of many normal faces, demonstrating that her face was within the range of typical facial appearances. When she continued to protest that her nose was too large and was the source of most of her life unhappiness, he, with some reluctance, agreed to a reconstructive surgery. She expressed pleasure with the outcome for the initial month postoperatively, then returned stating that the appearance of her nose "still is not right."

2. *Hypochondriasis* — The patient experiences an inner conviction that disease is present in his or her body, is chronically preoccupied with somatic concerns, and has a phobic fear of illness. Although the patient urgently seeks reassurance that there is no disease, reassurance given by the physician is never really trusted.

Millard T. was a 48-year-old man who sought neurological evaluation due to his fear that he had Alzheimer's disease. He had reported increased forgetfulness in everyday life and a specific inability to remember details needed to make his sales presentations at work. Neurological examination, CT scan, EEG, and blood tests screening for dementia were all normal. Detailed neuropsychological testing found a normal memory capacity and an absence of any other neuropsychological deficits. When Mr. T.'s memory problems were presented as performance anxiety for which a psychological treatment was needed, Mr. T. rejected the explanation, explaining that he was sure there was a neurological memory disorder present. By the end of the year he had undergone two other similar neurological investigations, each with similar results, but remained worried that he might have an early stage of Alzheimer's disease.

3. *Somatization Disorder* — A patient presents a chronic, disabling disorder with onset prior to age 30. There are multiple physical complaints, such as psychogenic vomiting, pseudoseizures, dyspareunia, psychogenic back pain, chest pain, and muscle aches and pains, for which no physical basis can be discovered. Specific symptoms are often temporary and vary from one body system to another, but the chronic occurrence of some type of somatoform symptom is a lifelong pattern.

Mildred F. was a 42-year-old female referred for psychiatric evaluation by her internist who had become frustrated with her many anxiously and dramatically presented complaints for which he could find only rare evidence of physiological disease. Mildred first began experiencing severe headaches after her high school graduation, returning home from college because of their severity. The headaches had persisted over the years, despite trials on all the common regimens for migraine headaches. Continuing as an adult to live at home with her mother, she had sought treatment over the years for severe menstrual cramps, dysuria and bladder incontinence, vaginitis, abdominal pain, intractable vomiting, joint pains, loss of coordination, fatigue and lethargy, syncope, paresthesias, multiple allergies, and blurry vision, for all of which there had been little convincing evidence demonstrated for physiological disease. She had undergone a hysterectomy, exploratory abdominal surgery, bladder suspension, and parathyroid surgery by age 30 in efforts to diagnose or treat her many symptoms. A neuroophthamological examination had conclusively shown her visual disturbance to be a conversion symptom.

4. *Somatoform Pain Disorder* — A patient presents with severe complaints of somatic pain which is excessive for the degree of tissue damage, or which has no physiological basis at all. The onset can occur at any age, but is most common during mid-adulthood. The duration of symptoms varies greatly depending upon how rewarding the chronic sick role becomes for the patient. The story of Mrs. M. above is typical, although the pain source can be located in any body system.

5. *Conversion Disorder* — A patient presents with a loss of or alteration in physical functioning suggesting a physical disorder. However, medical investigations fail to show a pathophysiological mechanism for the symptom and psychological factors are judged to be etiological for the symptom.

A conversion symptom is a signal pointing to other underlying psychological dysfunction. As such, it bears the same meaning to a psychiatrist as

fever does to an internist. Treatment with no other end-point than resolution of the conversion symptom (which usually resolves easily enough) is rarely adequate management.

Jackie F. was a 30-year-old female transferred from the Neurology Service where she had been admitted in great distress from the Emergency Room due to the sudden onset of paraplegia. A careful neurological examination had conclusively demonstrated her paralysis to be nonneurological in origin. As the psychiatrist explored her emotional and relationship world with her, she tearfully confessed to an impulsive sexual affair with her husband's brother. She experienced a full neurological recovery over a 48-hour period as she expressed her guilt and carried through with a decision to call her brother-in-law and end the relationship.

In addition, *Undifferentiated Somatoform Disorder* diagnoses those patients similar to Somatization Disorder but who do not fully meet the rigorous diagnostic criteria for the latter, while *Atypical Somatoform Disorder* describes patients whose features do not sufficiently fit any of the above descriptions.

For the practical decisions of treatment in a general medical practice, a physician need not commit to memory diagnostic criteria for each of the somatoform disorders. It is important, however, to be able to recognize the somatizing patient quickly.

Typical Presentations

The first clue as to diagnosis is provided by the style of interaction with which the somatoform patient initially meets the physician. Somatoform patients typically present with one of two manners of interaction, each a striking caricature of normal patient behavior. Most somatoform patients present either a *hysterical* or an *obsessional* style of behavior and processing of information during the patient interview.³

The hysterical presentation is typified by all patients with Somatization Disorder and many with Conversion Disorder. They describe symptoms in a dramatic, histrionic manner, offering intense global impressions of how ill they have become, but much vagueness of detail as to how the illness actually came about. The patient's eagerness to describe his or her distress contrasts with the inattention to details of the pattern of the illness. The following example illustrates the hysterical presentation of a patient with Somatization Disorder.

Joan F. was a young woman referred for evaluation of chronic abdominal pain. She entered the office anxiously puffing a cigarette and immediately

launched into anguished variations on the theme of "Something's got to be done," interrupted at times by pacing around the room. After fifteen minutes she had mentioned headaches, abdominal pain, difficulty swallowing, uncontrollable vomiting, and joint pains. Had I not had a referral letter, I would not have guessed that abdominal pain was the matter of greatest concern. Her diagnosis was Somatization Disorder.

There is evidence that the hysterical style of such patients may arise secondarily to their early childhood development. Patients with Somatization Disorder invariably were reared in chaotic homes with emotional overstimulation and an absence of consistent parenting. Histories of sexual and/or physical abuse, divorce, alcoholism, and other forms of physical or emotional neglect are typical. There may also be a neurophysiological correlate for the hysterical style. The neuropsychological research of Flor-Henry has documented specific left hemisphere deficits in information processing somewhat similar to those found in schizophrenia among the patients with Somatization Disorder.⁴

The obsessive cognitive style is typified by patients with Hypochondriasis and, often, Somatoform Pain Disorder.³ With these disorders the patient is somberly preoccupied with the details of his or her symptoms, often boring the physician with endless minutiae. Rather than expressing feelings of anxiety as such, the patient grills his or her doctor with endless questions about the factual details of a possible illness, seeking reassurance but accepting none of it when it is offered. The patient may be convinced that the disease is already present or may only fear its future possibility. The following description is a typical example of the obsessive presentation of a patient with Hypochondriasis:

John N. was an anxious but polite young man referred by his internist for evaluation of insomnia. In a soft, flat tone of voice, he described in minute detail his first night of poor sleep three years before and every change in pattern or severity since then. He brought voluminous notes describing in meticulous detail his sleep-wake cycles and responses to a half-dozen medications in all dose ranges. He also had his notes on a seemingly endless list of allergies. In the end, he revealed his own conviction that the basis of his sleep problem was hypoglycemia, for which he had devised an elaborate diet of food from supper to bedtime from which he felt he could deviate in no way if he was to sleep.

The obsessive style of the hypochondriacal patient may also, like that of the histrionic somatizer, represent sequella of early childhood learning in that

they too come from troubled homes. Unlike patients with Somatization Disorder, they tend to come from stable, but rigid, homes in which parent-child relationships are reliable but lacking in emotional warmth. Often a parent was hypochondriacal. Whether by social learning in the family or by a primary neurophysiological deficit, many hypochondriacal patients appear to lack the capacity of describe feelings with language, a condition termed *alexithymia*.³ When angry, afraid, or sad, an alexithymic patient reports a somatic symptom rather than describing his or her feelings in words.

Five Diagnostic Questions

Five diagnostic questions are useful for guiding a nonpsychiatric physician in his or her treatment of a somatoform patient. The following questions need to be answered:

1. *Has the plausible possibility of a physical disease been ruled out?*

Physical disorders, such as hyperparathyroidism, systemic lupus erythematosus, cryptococcal meningitis, brain tumor, multiple sclerosis, porphyria, or thyroid disease, in which vague symptoms or multiple nonspecific symptoms can occur in several organ systems should be carefully considered in the differential diagnosis. It should be remembered that half or more of all patients diagnosed with "conversion hysteria" disorder in some studies eventually have been found to have an underlying medical illness accounting for their symptoms when the patients were later reevaluated.

If physical disease is ruled out, the likelihood of a somatoform disorder is further increased by presence of the following.^{2,3}

1. Lengthy past history of poorly defined illnesses.

2. Multiple surgical procedures.

3. Difficulty in discussing emotional feelings.

4. A vague, dramatically presented medical history, or an obsessively detailed history.

5. Concurrent symptoms of depression, panic attacks, or phobias.

2. *If the symptoms are indeed somatoform rather than physical in origin, do the symptoms represent a primary or a secondary somatoform disorder?*

Secondary somatoform symptoms are most commonly due to depression, panic disorder with agoraphobia, or schizophrenia, in decreasing order of frequency of presentation.^{3,5,6} This is perhaps the most important distinction for a nonpsychiatric physician to make since many patients with somatoform symptoms secondary to depression or the anxiety disorders can be well managed within the context

of a general medical practice. Patients with a primary somatoform disorder, however, are more likely to have a chronic disorder which is not responsive to psychotropic medications, patient education, or brief office counseling.

A history for depression symptoms coincident with or prior to the somatic complaints should be obtained in every patient suspected of somatoform illness. Clinical depression can be diagnosed when a patient has experienced for a minimum of two weeks a dysphoric mood and at least four of the following list of eight depressive symptoms: (1) disturbed sleep; (2) loss of interest in hobbies, sex, or other pleasurable activities; (3) guilt and self-reproachful thoughts; (4) low energy level; (5) poor concentration and memory; (6) poor appetite; (7) slow, retarded speech and motor activity; and (8) feeling that life is not worth living.¹ Particularly in the elderly, the prominence of somatic complaints may be so striking that the underlying depressed mood is not obvious. Somatoform symptoms secondary to depression reliably improve as the mood improves.^{5,7} The depressed patient should be prescribed an adequate dose of an antidepressant for at least a four week trial.⁸

Imipramine is an effective antidepressant which is inexpensive and possesses a midrange spectrum of most tricyclic antidepressant side-effects.⁸ For most adults, it can be started at a dose of 25 to 50 mg daily, progressing the dose in daily 25 mg increments up to 150 to 200 mg daily or to the level of toleration. Effective doses for the elderly are typically half those for young adults. Although the occurrence of mild postural hypotension or noticeable anticholinergic side-effects, such as dry mouth, suggests that the serum Imipramine level may be in the therapeutic range, serum drug levels are also available for guiding dose selection with the elderly, medically sick patients, or when unusual side-effects suggest idiosyncratic pharmacokinetics. If a therapeutic response is achieved, the antidepressant should be continued for at least four months, then slowly discontinued in small decrements over a twelve week period.

Other tricyclic and heterocyclic antidepressants are also effective and may possess side-effect profiles better suited than Imipramine for specific patients. Many clinicians working with somatoform disorders have found the monoamine oxidase inhibitors, such as Phenelzine and Tranylcypromine, to be the most effective antidepressants for depression with secondary hypochondriasis, although the use of these drugs should be reserved for physicians familiar with their dose regulation and their dietary

and medication restrictions.^{7,8}

Over the past decade anxiety disorders, particularly Panic Disorder, Agoraphobia, and Post-Traumatic Stress Syndrome, in combination or alone, have been increasingly recognized as responsible for somatic symptoms of many patients in general medical practices who have diagnoses such as hyperventilation syndrome, mitral valve prolapse, costochondritis, gastritis, irritable colon, and other psychosomatic disorders.^{6,9} In a panic attack, a patient typically experiences the sudden onset of intense fear or discomfort associated with a combination of somatic symptoms, most of which are autonomic. Panic symptoms include dyspnea, feelings of unreality, palpitations, chest pain, dizziness, paresthesias, hot and cold flashes, vomiting, loss of bladder or bowel control, faintness, trembling, or sweating.¹ There has been increasing recognition of patients who experience only limited-symptom attacks in which only one or two of the above symptoms appear in paroxysmal fashion, creating the misleading impression of medical disease.⁹ Agoraphobia, a fear of being in places or situations from which escape might be difficult or embarrassing, is easier to recognize when the information is specifically sought from the patient. Patients often report an avoidance of being away from home alone, being in a crowd, standing in shopping lines, or traveling over bridges or through tunnels.¹ Panic attacks and agoraphobia may occur alone or together, either in common association with somatization.

Patients with Panic Disorder respond with high reliability to treatment with tricyclic antidepressants and, particularly, the monoamine oxidase inhibitors.¹⁰ Doses are similar to those described above for depression. As with depression, clinical improvement may not begin until two to four weeks after a full daily dose has been achieved.

In addition to the antidepressants, Alprazolam, a triazolobenzodiazepine, can be effectively used to treat Panic Disorder symptoms.¹⁰ Alprazolam should be started at 0.5 mg TID, increasing the dose by 0.5 mg every other day until symptoms remit or until a daily dose of 2 mg TID is achieved. Unlike the antidepressants, patients can become habituated to high dose Alprazolam so that rebound symptoms and a sedative-hypnotic withdrawal syndrome can occur if suddenly discontinued. Diazepam, chlor-diazepoxide, and most other benzodiazepines are ineffective for Panic Disorder.

Somatic symptoms secondary to Panic Disorder improve as the anxiety symptoms respond to effective treatment. Treatment should be continued for six months or longer, followed by slow discontin-

uation of the medications in small decrements over a twelve week period.

When either Major Depression or Panic Disorder is present, a psychiatric consultation should be obtained if there is not obvious improvement in the first month of treatment. There are a wide range of alternative psychopharmacological strategies available which are beyond the scope of the present discussion.

Finally, patients in the early stages of a psychosis can present with unexplainable somatic complaints.³ Usually these complaints represent somatic delusions. While antipsychotics will likely be the mainstay of treatment, all psychotic patients with predominant somatic symptoms should be referred for psychiatric consultation, since there may be an unsuspected potential for suicide or threat to other persons as a component of the psychosis.

3. *Are the presenting symptoms acute or chronic (longer than six months in duration)?*

The duration of somatoform symptoms is often of more importance than the specific somatoform diagnosis. The occurrence of a medical illness grants permission for the sick person to assume "the sick role" in society which includes release from the normal social obligations of society, such as working, parenting children, or attending school, and absolution of any blame for his or her condition.³ Every person who has suddenly become ill has experienced the pleasure of tender caretaking by family and friends and the freedom to leisurely rest at home without guilt. These many rewarding aspects of sick role behavior can gradually create a web of habitual interpersonal behaviors built around illness as the theme. This process is so powerful that any illness — medical or somatoform — can evolve into chronic, rigid sick role behavior if persistent long enough. This is most true for somatoform disorders because such patients very often have an accompanying personality disorder, one aspect of which is a poorly developed sense of personal autonomy. This personality deficit commonly is expressed as a need to be cared for in a dependent relationship with other persons. A chronic sick role can powerfully satisfy these yearnings for dependency.

The same somatoform symptom may be relatively easy to treat acutely, but nearly impossible to remove after persisting long enough to become woven into the fabric of the patient's life. While there are no absolute criteria for chronicity, symptom duration greater than six months is a useful clinical yardstick for defining chronicity.

Acute symptoms often respond well to feedback from the negative results of medical tests, patient

education, reassurance, or medication treatment without psychotherapy. Chronic symptoms frequently require multimodality treatment, combining two or more types of interventions chosen from psychopharmacology, behavioral or psychodynamic individual psychotherapy, family therapy, or social interventions, integrated into a comprehensive treatment plan. The greater the chronicity the greater the likelihood that the expertise of a psychiatrist or other mental health professional experienced in working with somatoform patients will be required for treatment.

4. *If the patient shows a hysterical style, are other diagnostic criteria present justifying a diagnosis of Somatization Disorder?*

The recognition of Somatization Disorder in a general medical practice is important, since the diagnosis implies that the patient has a chronic condition for which no current treatments, including all available medications, are very effective. With present treatments, the patient can be supported through exacerbations of symptoms due to life crises, but cannot be cured. Since the patient can be expected to continue year in and year out to present new or recurrent physical symptoms without organic disease, a primary focus of treatment, as with acute intermittent porphyria, is a protective effort to shield the patient from ill-advised surgeries and invasive diagnostic procedures.^{1,2}

Somatization Disorder is found in about 1% of all admissions to general hospitals, with about 98% of all cases female. The disorder first appears prior to age 30, usually, but not always, in a woman who presents in a hysterical style of interaction.^{1,2} Full diagnostic criteria for Somatization Disorder are listed in Figure 1.

5. *If there is a primary somatoform disorder, why is there an exacerbation now?*

All primary somatoform disorders show an exacerbation of symptoms with family or social stress. Symptoms generally improve as psychological and social stress can be ameliorated.² As a minimum, the following possibilities should be evaluated:³

a. The symptom may be an unspoken "cry for help" by the patient to a professional as a signal of an acute psychosocial crisis, such as spouse abuse in the marriage, a financial catastrophe, or a broken relationship.

b. The symptoms may represent an effort to establish a closer relationship with the physician by a patient who lacks needed social skills or feels too inadequate to request overtly the doctor's attention. The patient may be generating a symptom unconsciously designed to stir the doctor's interest.

Figure 1. Diagnostic Criteria for Somatization Disorder¹

- A. A history of many physical complaints or a belief that one is sickly, beginning before the age of 30 and persisting for several years.
- B. At least 13 symptoms from the list below. To count a symptom as significant, the following criteria must be met:
 - (1) No organic pathology or pathophysiologic mechanism to account for the symptom or, when there is related organic pathology, the complaint or resulting social or occupational impairment is grossly in excess of what would be expected from the physical findings.
 - (2) Has not occurred only during a panic attack.
 - (3) Has caused the person to take medicine, see a doctor, or alter life-style.
- C. Symptom List:
 - Gastrointestinal Symptoms:
 - 1. **Vomiting (other than during pregnancy)**
 - 2. Abdominal pain (other than when menstruating)
 - 3. Nausea (other than motion sickness)
 - 4. Bloating
 - 5. Diarrhea
 - 6. Intolerance of several different foods
 - Pain Symptoms:
 - 7. **Pain in extremities**
 - 8. Back pain
 - 9. Joint pain
 - 10. Pain during urination
 - 11. Other pain (excluding headaches)
 - Cardiopulmonary Symptoms:
 - 12. **Shortness of breath when not exerting oneself**
 - 13. Palpitations
 - 14. Chest pain
 - 15. Dizziness
 - Conversion or Pseudoneurologic Symptoms:
 - 16. **Amnesia**
 - 17. **Difficulty swallowing**
 - 18. Loss of voice
 - 19. Deafness
 - 20. Double vision
 - 21. Blurred vision
 - 22. Blindness
 - 23. Fainting or loss of consciousness
 - 24. Seizure or convulsion
 - 25. Trouble walking
 - 26. Paralysis or muscle weakness
 - 27. Urinary retention or difficulty urinating
 - Sexual Symptoms for the Major Part of the Person's Life After Opportunities for Sexual Activity:
 - 28. **Burning sensation in sexual organs or rectum (other than during intercourse)**
 - 29. Sexual indifference
 - 30. Pain during intercourse
 - 31. Impotence
 - Female Reproductive Symptoms Judged by the Person to Occur More Frequently or Severely than in Most Women:
 - 32. **Painful menstruation**
 - 33. Irregular menstrual periods
 - 34. Excessive menstrual bleeding
 - 35. Vomiting throughout pregnancy

Note: The seven items in boldface may be used to screen for the disorder. The presence of two or more of these items suggests a high likelihood of the disorder.

c. The symptom may be indicative of a strain in the doctor-patient relationship. The patient may have felt disappointment with some aspect of the doctor's behavior, now communicated by displaying an exaggerated symptom as a sign of displeasure.

Many problems in the above areas can be dealt with in discussions with the patient which provide clarification, education, and common sense advice. Depending upon training, temperament, and type of practice, specific physicians will, however, differ in the extent to which he or she wishes to counsel patients. If the life stress triggering a current bout of somatoform symptoms is outside the domain of interest or skill of the primary physician, a psychiatric consultation should be requested.

When psychiatric consultation is requested, the referring physician should maintain a treatment relationship with the patient. With current advanced pharmacology and diagnostic high technology, the healing power of a consistent human relationship between doctor and patient is often forgotten. The assurance of a supportive relationship with his or her primary medical physician is often the most valued possession of a patient with a somatoform disorder.

As a rule, a patient with a *primary* somatoform disorder has been injured emotionally during childhood so severely that normal emotional development could not occur.³ Although the history may be kept hidden in some cases, one expects to find some variant of a story which includes alcoholic parents, physical or sexual abuse, spouse abuse between the parents, adult responsibilities placed upon the growing child, an absence of parental warmth, or chaotic parenting. Although it may be hard for a nonpsychiatric physician to imagine, the relationship embodied in occasional, brief visits to the doctor where physical needs are discussed and cared for is for many somatoform patients the most consistent intimate relationship ever experienced with a benevolent person.

Treatment Guidelines

Despite the obstacles, a nonpsychiatric physician can nevertheless find the treatment of patients with primary somatoform disorders to be worthwhile for both doctor and patient provided the doctor structures the treatment relationship. The following guidelines are useful:

1. *Schedule regular, periodic appointments so that the patient need not generate a symptom in order to contact his or her physician.*

Patients with somatoform disorders need treatment which is consistent and expectable. They visit

a medical doctor for the emotional comfort gained, not for the cure of disease. Since there is no physical disease, the relationship should not be premised only upon the patient reporting for treatment when there are symptoms of genuine physical illness. Such patients should be given return appointments every one to three months with the message that they are to return whether sick or well.

2. *Emphasize mutual participation by the patient in treatment decisions. Assign responsibility to the patient for a portion of treatment — to exercise, to monitor physical symptoms, to stop smoking, to lose weight, to develop a social network for emotional support. Refuse to permit the patient to idealize the doctor and his or her power to heal.*

When physicians feel trapped in relationships with somatoform patients, it is usually when the patient has come to believe that the doctor can provide comfort and soothing to an extent or in a manner which the doctor cannot in fact provide. More than with other patients, it is unwise with somatoform patients for the physician to be seen as a god.

3. *Place strict, nonnegotiable limits upon inappropriate diagnostic tests or medications.*

It is often tempting to deal with a hypochondriacal patient by "Let's admit you to the hospital and run a few tests" in order to get the complaining patient off the physician's back. However, in nearly all cases this is a mistake with a hypochondriacal patient, who by definition is not reassured by reassurance. Hypochondriasis can be thought of as an addictive behavior in which the addiction is to the physical caring and nurturing a good physician provides to his or her patient. The physician who violates his or her best judgement by ordering marginally indicated, or non-indicated, diagnostic tests in order to reassure a hypochondriacal patient that "nothing is wrong" usually finds that, paradoxically, ordering the tests has only whetted the appetite of the patient for more. No matter what or how many tests have been ordered, there can always be one more, and the patient knows this better than the physician.

4. *Rely heavily upon the physical examination, objective tests, and external sources of information when deciding upon significant treatment recommendations.*

As one of my mentors, Dr. Ned Cassem, once advised me when I consulted him about a histrionic woman with psychogenic chest pain, "Practice veterinary medicine! How would you tell that a dog had angina? The dog can't talk, so you look at the EKG and watch the response to IV nitroglycerine."

Since a somatoform patient always has an un-

spoken, emotional agenda in the reporting of his or her symptoms, the physician must take all verbal reports of symptoms with a grain of salt.

5. *Encourage the patient to verbalize feelings or hurt, needs for affection, anger, or a need for help in a crisis. Show relatively more interest in spoken feelings and relatively less in physical symptoms to the extent tolerated by the patient.*

To the extent that feelings and wishes can be overtly acknowledged and expressed, they are less likely to find expression as symptoms.

6. *In starting treatment, obtain an agreement with the patient that you will be the sole primary care physician and that all consultations with other physicians will be coordinated by you. Obtain an agreement for open communication with all physicians and other health-care providers who have been involved in the case. Obtain all available records from other physicians and hospitals.*

If the patient refuses to grant any of these requests, refuse to treat the patient. Although this may sound harsh, in the long run this policy is protective of both the patient and physician. Although a temptation to some patients, it is always a self-destructive pattern to develop treatment relationships with multiple doctors, each of which views himself or herself as the primary physician. Medication abuse and treatment interventions by two physicians who unknowingly counteract one another are obvious consequences of this behavior; the patient's loss of the psychological benefit from a trusting relationship with one doctor is another.

The greatest difficulty in effectively treating a somatoform patient is the patient's ability to circumvent the structure imposed by the treating physician by finding a more accommodating doctor elsewhere in the community. Until medical societies, insurance companies, or governmental agencies produce a social mechanism for structuring the treatment relationship between a somatoform patient and health care providers collectively, many somatoform patients will remain beyond the reach of effective treatment of their psychiatric disorder.

5. *When educated about their somatoform disorders, some patients can make use of the clinical dictum to turn the symptom into a signal.*

Some patients may forever experience physical symptoms in the presence of life stresses. Eventually some of them can gain sufficient insight to look for a psychological stress of which they had been insufficiently unaware whenever a particular physical symptom or sensation arises. In this way, the somatoform disability paradoxically can become a type of coping resource expanding the patient's

awareness of his or her emotional world. For such patients, the old maxim, "I can feel it in my bones," is a literal expression.

Summary

In summary, it is not yet clear whether a patient with a primary somatoform disorder can ever so completely heal that he or she will experience no somatic reaction when depressed, angry, afraid, or otherwise stressed in life. Whether by virtue of a unique neurophysiology or by virtue of deeply ingrained learning in early life, some patients appear to have a near irreversible connection between limbic system activation and a disturbance, or the perception of a disturbance, in the physiology of one or more internal organs. However, by adopting a treatment program based upon simultaneously: (1) guaranteeing contact at expected, scheduled intervals with the doctor, whether there is a symptom or not, and (2) strict limits upon inappropriate diagnostic tests or medications, the medical physician may markedly improve the personal, family, and social functioning of the patient over the long term while protecting the patient and society from being drained by the astronomical costs which ensue when there is unchecked addictive behavior to health-care use. This approach is similar to many other forms of rehabilitative medicine in which the focus is not upon healing the original injury but upon improving function and relieving suffering. ★★★

2500 North State Street (39216)

References

1. Work Group to Revise DSMIII: Diagnostic and Statistical Manual Third Edition Revised, Washington, D.C.: American Psychiatric Association, 1987.
2. The Quality Assurance Project: Treatment Outlines for the Management of the Somatoform Disorders. Australian and New Zealand Journal of Psychiatry. 19:397-407, 1985.
3. Ford, C. The Somatizing Disorders: Illness as a Way of Life. New York: Elsevier Biomedical, 1983.
4. Flor-Henry, P., Fromm-Auch, D., Tapper, M.: A Neuropsychological Study of the Stable Syndrome of Hysteria. Biological Psychiatry 16:601-626, 1981.
5. Kellner, R., Fava, G.A., Lisansky, J., Perini, G.I., Zielesny, M.: Hydrochondriacal Fears and Beliefs in DSM-III Melancholia: Changes with Amitriptyline. Journal of Affective Disorders. 10:21-26, 1986.
6. Sheehan, D. V., Sheehan, K.H.: Diagnostic Classification of Anxiety and Phobic Disorders. Psychopharmacol Bull. 18:35-44, 1982.
7. Davidson, J.R.T., Miller, R.D., Turnbull, C.D., Sullivan, J.L.: Atypical Depression. Arch. Gen. Psychiatry. 39:527-534, 1982.
8. Bowden, C.L.: Current Treatment of Depression. Hospital and Community Psychiatry. 36:1192-1200, 1985.
9. Ballenger, J.C.: Pharmacotherapy of the Panic Disorders. J. Clin. Psychiatry. 47(Suppl):27-32, 1986.
10. Rosenbaum, J.F.: Limited-Symptom Panic Attacks. Psychosomatics. 28:407-412, 1987.

FAMILY PRACTICE. A REWARDING EXPERIENCE IN ARMY MEDICINE.

The Army has more soldiers with families than ever before. So when you join the Army Medical Team as a Family Practitioner, expect to spend most of your time serving not only soldiers, but their spouses and children, too. What's more, you won't have to worry about the paperwork, malpractice insurance premiums, or the costs incurred in running a private practice.

Expect to work in a highly challenging and varied environment. Working with a team of highly trained professionals, you can receive assignments almost anywhere in the United States; the Army offers the largest system of comprehensive health care in the nation. Family Practice positions are also available overseas, in Germany and Korea.

The benefits package available to Army Family Practitioners is quite attractive. You'll receive 30 days paid vacation, opportunities to continue education and conduct research, a chance to travel, and reasonable work hours.

All in all, your Army Family Practice will be a rewarding experience. Not only for you, but for Army families, too. Talk to your Army Medical Department Counselor for more information.



**ARMY MEDICINE
144 ELK PLACE, SUITE 1514
NEW ORLEANS, LA 70112-2640
(504) 522-1871 COLLECT**

ARMY MEDICINE. BE ALL YOU CAN BE.

Extravasation from the Upper Urinary Tract: Three Case Reports

JOHN P. ELLIOTT, M.D.

JAMES O. GORDON, M.D.

JOHN W. EVANS, M.D.

LUCAS O. PLATT, M.D.

WILLIAM HUGHES MILAM, M.D.

Tupelo, Mississippi

EXTRAVASATION OF URINE was once considered a fatal complication of genitourinary trauma unless drained promptly to prevent sepsis. External drainage is still the treatment of choice, but frequently is not necessary if the source of the extravasation ceases spontaneously, or is diverted by an internal stent. Smaller quantities of urinary extravasation may be absorbed safely if uninfected, and the leakage is of short duration.¹ The following are three representative cases of upper tract extravasation.

Case Report 1

T. M., a 65-year-old male, was admitted December 5, 1985 with a blocked left kidney and spontaneous extravasation secondary to a left ureteral calculus. The stone was displaced back into the kidney and a Double J stent was inserted. He was sent home to await Extracorporeal Shock Wave Lithotripsy (ESWL). Several days later he was admitted to his local hospital and subsequently was transferred to our institution with a diagnosis of confusion and impending stroke. An IVP, done in the emergency room, revealed continued extravasation (see Figure 1), secondary to urinary retention which had been unsuspected. The hydrostatic pressure from the bladder retention had been transmitted through the Double J stent and, therefore, had not allowed the area of spontaneous extravasation in the upper urinary tract to seal. A foley catheter in the bladder stopped the extravasation, and the confusion, thought to be secondary to low-grade sepsis,



Figure 1. A spot film of the left kidney during an IVP, which demonstrates pericalyceal extravasation and periureteral extravasation still within the confines of Gerota's fascia.

cleared within 24 hours. He was completely back to normal within 48 hours, and subsequently underwent ESWL, followed by transurethral resection of the prostate.

Case Report 2

C. W., a 43-year-old white male, was seen February 2, 1986, having been referred following trauma to the right kidney from a motor vehicle accident. An IVP revealed some extravasation from the lower pole of the right kidney, where there was evidently a large hematoma. A repeat IVP several days later

From the Urology Professional Association, 605 Garfield Street, Tupelo, MS.

revealed a large urinoma. Drainage was accomplished on February 13 by a small, muscle-splitting incision. Percutaneous drainage was considered but, due to the large retroperitoneal hematoma, it was thought that a larger drain was necessary. The uri-



Figure 2. An IVP demonstrates extravasation from the lower pole calyx pooled outside of Gerota's fascia.



Figure 3. IVP on the 12th hospital day demonstrates a high-riding left kidney with extravasation in the entire left flank and apparent disruption at the ureteropelvic junction.

noma contained clear urine. In retrospect this could have easily been drained percutaneously. The hydronephrosis resolved. Several days later he continued to put out large quantities of urine through the urinoma, and a Double J stent was placed in the ureter to divert urine to the bladder (see Figure 2). The urinoma drainage immediately ceased, and the drain was removed after one week. The Double J stent was kept in for two more weeks and removed after an IVP showed good function with no hydronephrosis.

Case Report 3

D. M., a six-year-old male, was admitted February 27, 1986 to SIC with head injuries sustained in an accident in which he, as a pedestrian, was hit by a fast-moving vehicle. No studies were done on the urinary tract until the fourth hospital day, when a CT scan of the upper abdomen (which was done because of a slowly dropping hematocrit), revealed extravasation from the left renal area. A follow-up KUB revealed normal architecture in the left kidney and a pool of extravasated urine within Gerota's fascia below the kidney. He gradually regained consciousness and was discharged from the SIC on the tenth hospital day. A follow-up x-ray on the 12th hospital day showed a progressively enlarging urinoma and hydronephrosis (see Figure 3). The ureter was not visualized in any of the films. Percutaneous drainage of the urinoma was accomplished under CT guidance in the radiology suite. The urinoma continued to drain. On the 15th post-operative day, his head injury had improved enough to allow a retrograde pyelogram under anesthesia. This revealed a blind-ending ureter at 17 cm, with a large gap between the ureteropelvic junction and the blind end of the upper ureter. It was speculated that this had occurred secondary to a snapping motion from hyperextension of the back and flank area at the time of the accident. Percutaneous nephrostomy was done to prevent further renal deterioration, and to allow further recovery from his head injury. On the 21st day, open exploration was done, and reanastomosis of the ureter and ureteropelvic junction was attempted. This could not be accomplished because of tension at the anastomotic site. Consideration was given to transplanting the renal artery, either lower on the aorta to reduce the space between the ureter and the pelvis, or autotransplantation of the kidney into the true pelvis. The kidney had three arteries, however, and therefore he was not considered a good candidate for this procedure. An adequate tension-free reestablishment of the renal/ureteral unit was done by lower pole resection and ureterocaly-



Figure 4. An antegrade pyelogram through a nephrostomy tube demonstrates prompt antegrade efflux of dye into the bladder and shows an intact uretero lower calyotomy anastomosis.

cotomy to the lower pole calyx. The nephrostomy tube was removed on the 14th postoperative day after nephrostogram revealed prompt outflow into the bladder (see Figure 4). The internal ureteral stent was left indwelling and removed on the 30th postoperative day. IVP at two years post-trauma revealed normal architecture.

Discussion

Spontaneous extravasation may occur with ureteral colic and is detected in a significant number of cases, particularly early after the onset of colic. Although extravasation secondary to calculus re-

quires careful observation, it is generally not a significant risk factor and most often clears spontaneously, even with continued blockage. We usually see over 200 ureteral colics yearly, and in 24 years have only drained one extravasation in which we were not also surgically approaching the stone. (That patient required surgical drainage for intra- and extra-peritoneal extravasation, although the patient had already spontaneously passed the small calculus.) Most blunt traumas may be handled non-surgically and particularly with the availability of percutaneous drainage and/or ureteral stents to drain urinomas and keep the urinary outflow unobstructed.^{2,3} C.T. is most helpful as an adjunct to the IVP.⁴ Percutaneous drainage in the third case was difficult because the kidney was rotated anteriorly by the urinoma. After draining the urinoma, however, the kidney settled back into a more normal position. It is noteworthy that, because no urine entered the left ureter, no blood showed up in the urinalysis. At three weeks post-trauma, we found the flank area to have some adhesions, but felt that the entire kidney and surrounding structures were quite adequately freed of these adhesions without great difficulty. The three week post-trauma appearance of the flank was thought to be quite acceptable, whereas a much later exploration might have presented much denser adhesions. Earlier exploration, of course, would have been done had the renal injury been suspected, or the head injury been less severe. Percutaneous nephrostomy allowed recovery from the other injuries, while keeping the renal unit intact.

★★★

605 Garfield Street (38801)

References

1. Cass, A. L.: Catheter Drainage Best In Bladder Rupture? *Urology Times*, Volume 16 #1:1, January 1988.
2. Steers, W. D.: Indwelling Ureteral Stents In Managing Ureteral Injuries Due to External Violence. *J. Trauma* 25:1001, 1985.
3. Roberts, R. A.: Conservative Management of Renal Lacerations in Blunt Trauma. *Can. J. Surg.* 30:253, 1987.
4. Cass, A. S.: Comparison of IVP and CT Findings in Patients with Severe Renal Injury. *Urology*, 29:44-7, 1987.



THE PRESIDENT'S PAGE

DAVID R. STECKLER, M.D.

Relative Values Need Relative Views

ONE OF THE most important and potentially divisive issues organized medicine has faced in many years begins this month with the release of the Harvard resource based relative value scales (RBRVS) study. The over two-year project was funded by Congress. During the next several months the study will be reviewed by many concerned organizations; and on July 1, 1989 the Secretary of HHS must report to Congress regarding the RBRVS study and the possible implementation of a fee schedule for physician services provided to Medicare beneficiaries after January 1, 1990.

The AMA has taken an active role in the study from the standpoint of providing resource and consultative services. The AMA's major goal in participating in the study was "... to develop an RVS that, if implemented in a Medicare payment system, would help improve the predictability, administrative efficiency and rationality of Medicare payment for physician services with minimal disruptions in patient care." The AMA believed that a resource based relative value schedule that incorporated a substantial role for organized medicine was more acceptable than such alternative Medicare physician payment approaches as physician DRGs and capitation of Medicare beneficiaries.

Just what is the Harvard resource based relative value scale study? To paraphrase the words of its principle researchers — it is an effort to measure time, intensity, investment in training, and practice cost of services and procedures performed by physicians. This definition also explains the difference between the Harvard RBRVS study and relative value scales of the past. The latter measured differences in charges. It is this distinction between the old and the new, particularly the ingredients of time and intensity, which has many of us on edge.

Assuming that the design and conduct of the RBRVS study is valid — and this certainly will be the first test the study faces — then its potential use becomes of paramount importance. Will Congress view it as a best alternative for reimbursing physicians under Part-B of Medicare? To derive a fee schedule from a relative value study requires a conversion factor. How will this conversion factor be negotiated? How will other third party payors utilize the RBRVS study? What are the alternatives to payment by a RBRVS?

Over the next several months numerous meetings will be conducted to consider the RBRVS study and the many questions it raises. I urge you to keep apprised of these activities and to let your MSMA officers and board members know your views in this regard.

The Positive Approach

These are difficult times for physicians. Our autonomy is being challenged in all areas. Our judgment is being questioned by many who are dubiously qualified to judge. We are expected to produce perfect results, regardless of the circumstances. It is understandable, then, that we often react to these perceived intrusions in a negative fashion. Unfortunately, this type of reaction is usually counterproductive, giving the appearance of being self-serving. Most of us know that a positive approach in our interactions with others, whether patients, office personnel, or elected officials, tends to produce better long-range results. In difficult times, we need to remind ourselves frequently of this fact.

Sometimes, taking the positive approach isn't easy. Our emotions and our frustrations often interfere. On the other hand, the negative approach is usually easier, and in the short run may produce the desired result in a temporary fashion; but in the long run, the positive approach usually wins out. A good example of the positive approach is the recent initiation of a long-range planning effort by our Mississippi State Medical Association. We hope this effort will produce a vehicle which will allow our association to produce positive long-term change for our patients and society at large, as well as for our profession. If we, as individual physicians, incorporate the positive approach into all of our activities, our esteem in the eyes of the public will surely increase, and the results we are attempting to achieve, if honorable, will surely be achieved in a long-lasting fashion.

GEORGE E. ABRAHAM, II, M.D.
Associate Editor

Medico-Legal Brief

Vets Disabled by Alcoholism Not Entitled to Time Extension For Educational Benefits

Veterans who did not use their VA educational

benefits within the 10 years allowed by law because they were disabled by alcoholism were not entitled to an extension of time, the U.S. Supreme Court ruled.

The Veterans Administration refused to grant two recovered alcoholics extensions of time in which to use their VA educational benefits. Under VA regulations, alcoholism not secondary to an acquired psychiatric disorder was willful misconduct that barred an extension of time in which to use their educational benefits. The veterans claimed that the alcoholism regulation violated the Rehabilitation Act on the ground that alcoholism was a handicap within the meaning of the Act.

The Supreme Court said that the claim based on violation of the Rehabilitation Act was subject to the judicial review. The regulation did not violate the Rehabilitation Act. The Act was amended after the regulation was in place, and it did not attempt to repeal the alcoholism regulation. The phrase "willful misconduct" was used in other veterans benefits statutes, and the legislative history confirmed that Congress intended that the VA apply the same test of willful misconduct in granting extensions of time for educational benefits as it was already applying in granting disability compensation. The high court said that it was by no means clear that the Rehabilitation Act and characterization of primary alcoholism as a willfully incurred disability were in irreconcilable conflict. — *Traynor v. Turnage*, 108 S.Ct. 1372 (U.S.Sup.Ct., April 20, 1988)

Editor's Note: The AMA and the American Psychiatric Association filed a brief as *amici curiae* in support of the petitioners in the *Traynor* case. In its brief, the AMA presented a strong argument that the pathological use of alcohol is a disease, but the Supreme Court declined to reach that issue. Instead, the Court, in a 4-3 decision, merely found that Congress, in enacting §504 of the Rehabilitation Act, had not rejected the Veterans Administration view that primary alcoholism constitutes willful misconduct *per se*.

BOOK REVIEW

Neurology: Problems in Primary Care. James L. Bernat, M.D. and Frederick M. Vincent, M.D. Oradell, New Jersey: Medical Economics Books, 1987. \$39.95

This is a well-organized, well-written general text on neurological diseases and the neurologic complications of other medical diseases, conditions, and indications.

The "Annotated Bibliography" at the end of each chapter gives the busy clinical practitioner of general or specialty medicine a quick overview of the contents of the source cited. This is an unusual and quite helpful inclusion, one which I personally wish more authors utilized.

This reviewer takes issue with the statement on page 62 that routine EEGs "provide relatively little information." The authors seem to contradict themselves when they later state that "An EEG should be ordered whenever an epileptic seizure is suspected" and "EEG should also be performed on the patient with memory and cognitive impairment." Also, no mention is made about the valuable addition of 24-hour EEG recordings via portable magnetic tape procedures in the evaluation of vague seizures and/or syncope workups. Nor is any reference made to combined TV-video EEG recordings

for analysis of complex or poorly controlled seizure disorders.

In this day and time of emphasis on medical economics, it is admirable to see some reference given to the cost factors of various neurodiagnostic tests available to the practicing clinician. Actual dollar estimates are given for each test.

An excellent chapter on lumbar puncture indications and techniques should be useful to every practicing physician. Chapter 34, dealing with the neurologic complications of pregnancy, is quite timely and complete.

The "When to Consult" sections seem quite appropriate but were deleted from the chapter on "Movement Disorders and Sleep Disorders," (hopefully by oversight).

The numerous tables in each chapter are quite helpful from an organizational memory standpoint and are much preferred to graphs that are usually difficult to read and interpret.

The "Patient Information Guide" of the appendix lists mailing addresses of numerous organizations dealing with the wide range of acute and chronic neurologic diseases. This is a novel and helpful section for the busy clinician.

This text is well-written, easy to read, and the price (\$39.95) is right. I believe it will help substitute for several harder to read and much more expensive texts that have been on the market for many years.

ANCEL C. TIPTON, JR., M.D.
Jackson, MS



Doctor,

Have you ever looked for a different way to say "Thank You," "Congratulations," or "Get Well Soon"?

All of these messages are available, along with memorial tributes, in greeting cards from the MSMA Auxiliary. Each card signifies your donation to the AMA-ERF in the name of a friend or colleague.

For information about AMA-ERF greeting cards for year-round use, contact a member of your local MSMA Auxiliary, or Kathy Carmichael, 106 Colonial Place, Hattiesburg, MS 39401; telephone 268-9642.

LETTERS

TO THE EDITORS:

In a recent commentary published in the *Journal MSMA* (April 1988) you allowed me to express my opinion as to the need for the doctors in this state to become involved in judicial elections. I cited several changes in the laws pertaining to medical professional negligence and specifically referred to one case in which the Mississippi Supreme Court allowed a pharmacologist to testify as a medical expert against a physician regarding prescription of a certain medication.

Interestingly enough, this broad view that anyone possessing any "medical knowledge, however obtained" can testify as a medical expert is not shared by the Alabama Supreme Court. In Alabama "medical testimony" is still defined as testimony obtained only from physicians or medical treatises that have been accepted by the medical profession as authoritative. In reaffirming the common sense approach to establishing expert medical testimony the Alabama Supreme Court said, "*While their knowledge of the drug and its effect on the human body may or may not be greater than that of a medical doctor authorized by law to prescribe the drug, we cannot permit a nonphysician, who cannot legally prescribe a drug, to testify concerning the standard of care that should be exercised in the prescription of the drug.*" (Bell v. Hart, 516 So. 2d 562 [Ala. 1987]). In their opinion they also cited a case in which the Arizona Supreme Court refused to let a Ph.D. in Pharmacology testify and another case in which the Minnesota Supreme Court ruled that a psychologist who had extensive training and experience in psychology and pharmacology, including a Ph.D. in biopsychology, was not qualified to testify as a medical expert because he did not have "practical knowledge and experience" relative to prescription of the drug in question.

Enough said?

MIKE D. HOUP
General Manager
Medical Assurance
Company of Mississippi

TO DR. JOHNSTON:

I read with interest your editorial ("Fat Cats") in the June issue. I must comment.

People will do what is necessary to meet their

needs, even if it kills them. This is a clue to (1) the strength of the motivation to meet the need and (2) the lack of conscious understanding of the need itself.

Take overeating, for example. You say that fat people do not control their weight. Just the opposite is true. Fat people do control their weight. They rigorously and consistently control their eating so that they eat too much. Despite discomfort, ridicule, expense or attendant depression, fat people will make sure that they continue to overeat. Fat people often organize their whole life around eating. Indeed, it could be argued that the fat person exerts too much weight control.

Why might a person become overweight?

A fat person may be motivated by negative feelings; inferiority, for example. Perhaps a powerful person in that individual's life (usually a parent) called him stupid often enough that he believed and internalized the message. Do not underestimate the power of his motivation. If a fat person is eating to prove inferiority, he will not be proven wrong! This is not lack of will power. Indeed, while misguided, this is will power of awesome magnitude. Again, he will meet the need to be inferior even if it kills him.

What is the payoff for the fat person sitting in the physician's office?

Fat people are unacceptable in our society. Their physicians threaten, cajole, plead, lecture, beg and may use every trick to get them to lose weight. But the physician is doing exactly what the fat person needs. That is, a powerful and influential member of the fat person's society (not a parent, this time) is telling him that he is not acceptable, that he is, indeed, inferior.

Payoff!

WALT KRUCKEBERG, Ph.D., Director
Biochemical Genetics Laboratory
University Medical Center
Jackson, MS

TO DR. JOHNSTON:

I just read your editorial entitled "Fat Cats" in the *Journal*. While I have to admit the editorial entertained me, I was struck that the results in your patients are similar to mine in the diabetic patients I have been following. If you ever find anything that works in getting them to lose weight, please feel free to advise me.

DAVID M. OWEN, M.D.
Hattiesburg, MS

MEDICAL ORGANIZATION

MACM Presents 7th Annual Robert S. Caldwell Award

Dr. Marc Aiken of Johnson City, Tennessee, a resident in orthopedic surgery at the University of Mississippi Medical Center, received the Seventh Annual Robert S. Caldwell Memorial Award.

The award is presented yearly by Medical Assurance Company of Mississippi to the resident who is most exemplary in the practice of medicine, in his rapport with patients and in his documentation of patient care.



Dr. Aiken earned the B.S. in 1978 at Mississippi State University and the M.D. in 1983 at the University of Mississippi Medical Center. Since the completion of his residency in June he has been associated with the Watauga Orthopedic Professional Association and Appalachian Sports Medicine Clinic in Johnson City, Tennessee.

He is the son of Mr. and Mrs. Charles Aiken of Starkville.

Dr. Sutherland Receives Caduceus Club Award



Dr. C. G. Sutherland, right, received the Caduceus Club's first Outstanding Service Award from Dr. D. P. Smith. The award recognizes Dr. Sutherland's loyalty, dedication and continuing support of the MSMA Impaired Physicians Program.

Young Physicians Elect Officers, Governing Council

Dr. Timothy J. Alford of Kosciusko recently assumed the post of chairman of the MSMA Young Physicians Section (YPS). He succeeds Dr. George E. McGee of Hattiesburg, MSMA's first YPS chairman, who currently is serving as chairman of the AMA Young Physicians Section.

The YPS was established as a forum to focus on the unique problems and concerns of physicians under the age of 40. More than 200,000 physicians, or 52% of all physicians, fall into this category.

Serving with Dr. Alford in planning the YPS programs for the coming year are Dr. Michael D. Maples of Jackson, chairman-elect, and Dr. Charles E. Guice of Hattiesburg, secretary-treasurer.

Members of the Governing Council are: Drs. Kenneth L. Hines of Greenwood; Charles S. Watras of Winona; Jack H. Kahlstorf of Tupelo; Darden H. North of Jackson; T. Keith Everett of Meridian; Candace E. Keller of Hattiesburg; Joseph S. Moak, Jr. of Brookhaven; and Craig A. Dawkins of Gulfport.

Pediatric Seminar Convenes This Month in Jackson

The Fifth Annual Pediatric Seminar convenes September 26 and 27 at the Sheraton Regency in Jackson. The Mississippi State Department of Health sponsors the event, and the Mississippi Primary Health Care Association and the University of Mississippi School of Medicine co-sponsor it.

The seminar targets information to physicians and nurse practitioners involved in the care of children and provides approved continuing education to both physicians and nurses.

First day workshops focus on general pediatric issues. The latest findings on and treatments of sickle cell disease dominate the second day's agenda.

For more information, contact Dr. Gladys Riddell at 601/960-7463.

MSMAA Representatives Attend AMA Auxiliary Annual Session



MSMA Auxiliary representatives to the AMA Auxiliary Annual Session in Chicago are pictured above. Seated, from left, are: Mrs. Ben (Kathy) Carmichael; Mrs. Joe (Peggie) Herrington, immediate past president; Mrs. D. P. (Ruth) Smith, president; Mrs. Eric (Peggy) Lindstrom, president-elect; and Mrs. Kenneth (Susan) Hines. Standing, from left, are: Mrs. Tim (Mary Al) Alford; Mrs. John (Dottie) Estess; Mrs. Ed (Jean) Hill; Mrs. Jimmy (Jo) Waites; Mrs. Stanley (Beth) Hartness; and Mrs. Ted (Barbara) Blanton. Jean Hill was installed as president-elect of the AMA Auxiliary at the June meeting. She is the first Mississippian to hold the post.

Dr. Cobb Recognized for Efforts Toward Maternal, Child Health

The Mississippi Coalition for Mothers and Babies honored State Health Officer Dr. Alton B. Cobb for his support of the Coalition's efforts in behalf of Mississippi mothers and infants in a ceremony July 7.

The Time, Leadership and Concern Award presented to Dr. Cobb recognizes his achievements in improving the quality of life at birth in Mississippi.

Infant mortality rates have fallen significantly in the 15 years since Dr. Cobb took the helm at the Mississippi State Department of Health. In 1973, the state's infant mortality rate was 25.8 per 1,000 live births. In 1987 the rate dropped to 13.7.

The Mississippi Coalition of Mothers and Babies is a volunteer advocacy group with members who are both consumers and providers of perinatal health care. Its board of directors represents all nine of Mississippi's public health districts.

Dr. Cobb has been in public health for three decades, having first joined the State Department of Health as Sunflower County Health Officer in 1957. He later served as director of the agency's chronic illness services from 1962 to 1968. Before becoming State Health Officer, he was director of the Medicaid Commission and of the Comprehensive Health Planning Department.

The Madison County native is a University of Mississippi alumnus who earned his M.D. degree at Johns Hopkins School of Medicine and interned at Charity Hospital in New Orleans. He earned a master's degree in public health from Tulane University.

Dr. Nichols Receives Holliman Award at UMC



Dr. Howard Nichols, at left, associate professor of pediatrics and director of the pediatric outpatient clinic, was named recipient of the Holliman Award as the "outstanding pediatric faculty member" at the University of Mississippi Medical Center. The award was presented by Dr. Owen B. Evans, associate professor of pediatrics and director of the Division of Pediatric Neurology, at right.

**For a special kind of office help,
come to the Source.**

OffiSource

Business Furnishings / Supplies / Machines
277 E. Pearl St. / Jackson, MS 39205
352-9000 / Toll-free 1-800-682-5399

UMC Announces Faculty Appointments

Twenty-eight have been named in faculty promotions at the University of Mississippi Medical Center for the coming academic session.

Dr. Norman C. Nelson, UMC vice chancellor for health affairs, announced the promotions following approval of the Board of Trustees of State Institutions of Higher Learning. The appointments included 17 in the School of Medicine, one in the School of Nursing, two in the School of Health Related Professions, two in the School of Dentistry and six centerwide.

Promoted to the rank of professor in the medical school were Dr. Howard T. Milhorn, Jr., professor of family medicine; Dr. Andrew S. Parent, professor of neurosurgery; Dr. Owen B. Evans, professor of pediatrics and director of the Child Development Clinic, and Dr. Neil S. Whitworth, professor of obstetrics and gynecology. Dr. Buford Gilbert was named professor of endodontics and chairman of the department in the School of Dentistry, and centerwide, Dr. Beth Hoskins was promoted to professor of pharmacology and toxicology.

Named associate professor in the School of Medicine were Dr. William H. Replogle, associate professor of family medicine; Dr. Abelardo S. Wee, Jr., associate professor of neurology; Dr. Hans-Georg O. Bock, associate professor of preventive medicine; Dr. Victoria M. Sopelak, associate professor of obstetrics and gynecology; and Dr. Lawrence S. Schoen, Dr. Steven R. Rapp and Dr. Nina B. Goss-Moffitt, associate professors of psychiatry and human behavior. Centerwide, Dr. Donald Sittman, Jr. was named associate professor of biochemistry; Dr. Robin W. Rockhold, associate professor of pharmacology and toxicology, and Dr. Jean-Pierre Montani, associate professor of physiology and biophysics.

Ed North was promoted to associate professor of cytotechnology in the School of Health Related Professions.

Dr. Milhorn was appointed to the UMC medical school faculty in 1964 as assistant professor of physiology and biophysics and was promoted to associate professor and coordinator of the State Biomedical Engineering Program in 1967. He was moved to the rank of professor of physiology and biophysics and was named assistant professor of medicine (research) and acting director of the SBEP in 1973. He was named an assistant professor of family medicine (research) in 1977, was promoted to director of the research division in 1981 and to as-

sociate professor in 1982. A 1960 graduate of Lincoln Memorial University, he earned the Ph.D. in 1964 and the M.D. in 1975 at UMC, where he took his postdoctoral fellowship, internship and residency. He also was chairman of physiology at East Tennessee State University from 1975-1976.

Dr. Parent was named UMC assistant professor of neurosurgery in 1978 and was promoted to associate professor in 1982. He earned the A.B. cum laude in 1966 at St. Michael's College and the M.D. in 1970 at the University of Vermont Medical College. He took his internship at the University of Texas Medical Branch at Galveston, a residency at Emory University and fellowship at the UT Medical Branch at Galveston. He was Captain in the U.S. Air Force from 1972-1974 and in the USAF Reserve from 1974-1979.

Dr. Evans came to the Medical Center in 1983 as associate professor of neurology and pediatrics and chief of the Division of Pediatric Neurology from Vanderbilt University, where he was assistant professor of neurology and pediatrics. He earned the B.A. in 1969 and the M.D. in 1973 at Vanderbilt University, interned at Children's Orthopedic Hospital and Medical Center in Seattle, Washington and took residencies in pediatrics and neurology at Vanderbilt. He was a lieutenant in the U.S. Navy Medical Corps from 1974-1976.

Dr. Whitworth, who earned the B.S. in 1962 at

Doctor, Can You Use Any Of These MSMA Information Services?

- **Literature for your patients explaining why health care costs are going up**
- **Information on how you can conduct a patient survey in your practice**
- **CommuniCare brochures**
- **AIDS Speakers Bureau**
- **Marketing Tips for Physicians**

(Contact MSMA today to request any of these materials or services.)

UMC FACULTY/Continued

San Diego State College and the Ph.D. in 1972 at Rutgers University, came to the Medical Center in 1976 as assistant professor of obstetrics and gynecology and assistant professor of physiology and biophysics. He was promoted to associate professor of obstetrics and gynecology in 1981. He took his postdoctoral fellowship at the University of Tennessee Center for the Health Sciences, where he was assistant professor of physiology and biophysics from 1974-1976. He also has worked as a research associate in medical psychology at Scripps Clinic and Research Foundation at San Diego, California.

Dr. Gilbert was appointed assistant professor of restorative dentistry in the UMC School of Dentistry in 1974, was promoted to associate professor of endodontics in 1979 and named chairman of the department in 1984. He graduated in 1968 from Mississippi State University, earned the D.M.D. in

1972 at the University of Alabama and the Certificate in Endodontics in 1979 at Louisiana State University. He was a Captain in the U.S. Air Force Dental Corps from 1972-1974.

Dr. Hoskins was named assistant professor of pharmacology and toxicology on the UMC center-wide faculty in 1972 and was promoted to associate professor in 1982. She was the Mississippi Heart Association Research Fellow in pharmacology at the Medical Center from 1971-1974. A 1965 graduate of Belhaven College, she came to UMC as a National Institutes of Health predoctoral fellow in biochemistry until 1969, and in pharmacology from 1969-1970, when she received the Ph.D. She took her postdoctoral training at the University of Florida at Gainesville.

Dr. Replogle, a 1971 graduate of Mississippi State University, earned the M.A. in 1975 at Ole Miss and the Ph.D. there in 1982. He was appointed instructor in family medicine at UMC in 1984 then was promoted to assistant professor. He held positions at the Northwest Alabama Mental Health Center from 1979-1983 as coordinator of alcoholism programs, coordinator of inservice training and director of research and evaluation. He also was a computer and statistical specialist with the Bureau of Educational Research at Ole Miss during that time.

Dr. Wee was appointed to the UMC medical school faculty in 1984 as assistant professor of neurology. He was clinical assistant instructor in neurology at SUNY Downstate Medical Center from 1982-1983 in Brooklyn. He earned the B.S. magna cum laude in 1972 and the M.D. cum laude in 1976 at the University of Santo Tomas at Manila, where he took his internship. He took residency training at the Chinese General Hospital and Medical Center in Manila and the University of Maryland Hospital in Baltimore, with fellowships at SUNY Downstate Medical Center and at UMC.

Dr. Bock, who earned the B.S. in 1968, the Ph.D. in 1975 and the M.D. in 1977 at Vanderbilt University, was appointed UMC assistant professor of preventive medicine and assistant professor of pediatrics in 1983. Following a residency and fellowship at Baylor College of Medicine he was appointed a research associate in pediatric genetics there.

Dr. Sopelak was named UMC assistant professor of obstetrics and gynecology in 1984. She earned the B.S. in 1976 and the M.S. in 1978 at the University of Connecticut and the Ph.D. in 1981 at West Virginia University. She completed a postdoctoral fellowship with the Ford Foundation Preg-

DOCTOR'S EXECUTIVE SET SPECIAL

500 Business Cards
500 Appointment Cards
500 Envelopes / 500 Letterheads

All printed on quality white paper with
black ink (Includes minimum typesetting) **\$79⁹⁹**

1000
ENVELOPES

#10 or
6³/₄ Regular White
24 lb. Envelopes

\$34⁹⁵

1000
6³/₄ BLUE
RETURN
ENVELOPES

\$29⁹⁵

Printed in Black Ink

Offer includes minimum typesetting / Window envelopes — Add 10%
All orders shipped U.P.S. or on our delivery trucks at no additional charge.

Steve Kowalski's

Northtowne Printers

3909 Northview Drive • Jackson, MS 39206

(601) 981-2675

nancy Research Branch of the National Institute of Child Health and Human Development, National Institutes of Health at Bethesda, Maryland in 1984.

Dr. Schoen came to the Medical Center in 1982 as instructor in psychiatry and human behavior (psychology) and was promoted to assistant professor and assistant director of the Division of Somnology in 1983. He was named director of the UMC Sleep Disorders Center in 1985 and since 1982 has been assistant director of the dream/sleep laboratory at the Jackson Veterans Administration Medical Center. He is a 1974 graduate of the University of Colorado and earned the M.A. in 1978 at the State University of New York College of Arts and Sciences at Geneseo and the Ph.D. in 1982 at Bowling Green State University, where he was a teaching fellow.

Dr. Rapp came to the Medical Center in 1983 as instructor in psychiatry and human behavior and instructor in medicine (research). He also is director of the behavior gerontology program at the Jackson Veterans Administration Center. He earned the B.A. in 1970 and the M.A. in 1976 at Bradley University and the Ph.D. in 1976 at West Virginia University. He took his residency at UMC and the Jackson VA Consortium.

Dr. Goss-Moffitt was appointed UMC assistant professor of psychiatry and human behavior in 1983 and had been on the UMC clinical faculty since 1968. She is a graduate of Millsaps College and earned the M.D. in 1950 at Tulane University. She took her internship at St. Elizabeth's Hospital in Washington, D.C. and residencies at the University of Louisville (Kentucky) Hospitals and at UMC. She held a medical staff appointment at Mississippi State Hospital from 1952-1953, before going into private practice in Mississippi. She was named acting clinical director of Western State Hospital at Staunton, Virginia in 1961, returning to Mississippi State Hospital in 1964. She also has been a member of the Mississippi State Board of Health and was medical director of the Chemical Dependency Unit at the Mississippi Baptist Medical Center in 1978.

Dr. Sittman is a 1971 graduate of the University of North Carolina at Chapel Hill, where he earned the Ph.D. in 1978. He took his postdoctoral fellowship at Florida State University and was appointed UMC assistant professor of biochemistry in 1982.

Dr. Rockhold was named to the centerwide faculty in 1983 as assistant professor of pharmacology and toxicology. He is a 1973 graduate of Kenyon College and earned the Ph.D. in 1978 at the Uni-

NAVAL RESERVE PHYSICIAN

- Monthly Stipend for Physicians in training leading to qualifying as General/Orthopedic/Neurosurgeon or anesthesiologist.
- Loan repayment of up to \$20,000 for Board eligible General/Orthopedic surgeons and anesthesiologists.
- CME opportunities.
- Flexible drilling options.

*Promotion Opportunities

*Prestige

*For graduates of AMA approved
Medical Schools*

**CALL YOUR
NAVAL RESERVE FORCE
REPRESENTATIVE TODAY.**

1-800-443-6419

UMC FACULTY/Continued

versity of Tennessee Center for the Health Sciences. He took postdoctoral fellowships there and at the Pharmakologisches Institut der Universität Heidelberg, West Germany. He was assistant professor of physiology and biophysics at the University of Tennessee for the Health Sciences from 1982-1983.

Dr. Montani was the top graduate in 1970 at the College St-Michel at Fribourg, Switzerland, in 1973 at the University of Fribourg and in 1977 at the Medical School of Geneva, where he earned his medical degree and took his residency. He was research assistant in physiology at the Cardiovascular Institute of the University of Fribourg from 1977-1979, and was named UMC visiting assistant professor of physiology and biophysics in 1982.

North, who earned the B.S. at Millsaps College and the M.S. at UMC, was appointed to the medical school faculty in 1972 as instructor in preventive medicine, following four years as a research assistant in the department. He was named instructor

in pathology (cytopathology) in 1979 and assistant professor of cytotechnology in the School of Health Related Professions. He also has held an auxiliary faculty appointment at William Carey College in Hattiesburg since 1980.

Also promoted to the rank of assistant professor were in the School of Medicine, Dr. Cornelius J. O'Neill, and Dr. Joseph L. Wilson, assistant professors of medicine; Dr. Harriette L. Hampton and Dr. William A. Bennett, assistant professors of obstetrics and gynecology, Dr. James M. Fitterling and Judy Lyons, assistant professors of psychiatry and human behavior; and Dr. Robert A. Mallette, assistant professor of ophthalmology. Centerwide, Dr. Victor L. Davidson was promoted to assistant professor of biochemistry.

Barbara Glasscock was promoted to assistant professor of nursing in the School of Nursing; Dr. Acie Whitlock, assistant professor of endodontics in the dental school and in the School of Health Related Professions, Dr. Linda Barkett, assistant professor of dental hygiene.

"A Sign of the Times!"



SALES — SERVICE — LEASING

HARRELD CHEVY-OLDS

Call Toll-free 1-800-451-3908



DALE L. TIPTON, M.D.

Associate Clinical Professor, Department of Otolaryngology, Head and Neck Surgery, University of California School of Medicine, San Francisco, California.
Chairman, Division of Otolaryngology, Franklin Hospital, San Francisco, California.
Lieutenant Colonel, U.S. Army Reserve.

EDUCATION University of California at Berkeley, A.B. Physiology; University of California School of Medicine, San Francisco, M.D. and Master of Science, Pharmacology.

RESIDENCY University of California School of Medicine, San Francisco: General Surgery—2 years; Otolaryngology—3 years.

FELLOWSHIPS National Institute of Health Fellow; Cancer Research Institute, University of California, San Francisco.

OUTSTANDING ACHIEVEMENTS Freshman Medical Student Research Award; Class President—2nd year medical school; Student Body President—senior year medical school; Special Award by National Institute of Health to attend and present paper at International Congress of Otolaryngology in Tokyo, Japan; Chairman, Department of Otolaryngology, San Francisco General Hospital 1970-76; Chief of Medical Staff, Franklin Hospital 1982-84.



Dr. Tipton and residents examining post-operative patient in recovery room.

“I joined the Army Reserve shortly after completing my responsibilities as Chief of Staff of Franklin Hospital in San Francisco. I was intrigued with the idea of trying something different, such as Army Medicine.

“I find that the challenges and rewards of serving as an Army Reserve physician complement my civilian practice. For a number of years, I’ve been teaching as a member of the Clinical Faculty at the University of California School of Medicine, and I thoroughly enjoy the many teaching opportunities available to me in the Reserve. It is a rewarding experience to be involved in the training of Army medical students, interns, and residents. I also enjoy interacting and exchanging information with full-time Army physicians and seeing a wide variety of interesting clinical cases.

“After 18 years of private practice, I find it stimulating to be able to use my experience and expertise in a totally different medical setting. I highly recommend Army Medicine to any interested physician.”

Find out more about the medical opportunities in the Army Reserve. Call toll free 1-800-USA-ARMY.

**ARMY RESERVE MEDICINE.
BE ALL YOU CAN BE.**

A NEW H₂ Antagonist

AXID[®] 300mg

nizatidine

Effective once-nightly
duodenal ulcer therapy available in a
Unique Convenience Pak
for better patient compliance



AXID[®] nizatidine capsules

Brief Summary: Consult the package insert for prescribing information.

Indications and Usage: Axid is indicated for up to eight weeks for the treatment of active duodenal ulcer. In most patients, the ulcer will heal within four weeks.

Axid is indicated for maintenance therapy for duodenal ulcer patients, at a reduced dosage of 150 mg b.i.d. after healing of an active duodenal ulcer. The consequences of continuous therapy with Axid for longer than one year are not known.

Contraindication: Axid is contraindicated in patients with known hypersensitivity to the drug and should be used with caution in patients with hypersensitivity to other H₂-receptor antagonists.

Precautions: General—1. Symptomatic response to nizatidine therapy does not preclude the presence of gastric malignancy.

2. Because nizatidine is excreted primarily by the kidney, dosage should be reduced in patients with moderate to severe renal insufficiency.

3. Pharmacokinetic studies in patients with hepatorenal syndrome have not been done. Part of the dose of nizatidine is metabolized in the liver. In patients with normal renal function and uncomplicated hepatic dysfunction, the disposition of nizatidine is similar to that in normal subjects.

Laboratory Tests: False-positive tests for urobilinogen with Multistix[®] may occur during therapy with nizatidine.

Drug Interactions: No interactions have been observed between Axid and theophylline, chloridiazepoxide, lorazepam, lidocaine, phenytoin, and warfarin. Axid does not inhibit the cytochrome P-450-linked drug-metabolizing enzyme system; therefore, drug interactions mediated by inhibition of hepatic metabolism are not expected to occur. In patients given very high doses (3,900 mg) of aspirin daily, increases in serum salicylate levels were seen when nizatidine, 150 mg b.i.d., was administered concurrently.

Carcinogenesis, Mutagenesis, Impairment of Fertility: A two-year oral carcinogenicity study in rats with doses as high as 500 mg/kg/day (about 80 times the recommended daily therapeutic dose) showed no evidence of a carcinogenic effect. There was a dose-related increase in the density of enterochromatin-like (ECL) cells in the gastric oxyntic mucosa. In a two-year study in mice, there was no evidence of a carcinogenic effect in male mice, although hyperplastic nodules of the liver were increased in the high dose males compared to placebo. Female mice given the high dose of Axid (2,000 mg/kg/day, about 330 times the human dose) showed marginally statistically significant increases in hepatic carcinoma and hepatic nodular hyperplasia with no numerical increase seen in any of the other dose groups. The rate of hepatic carcinoma in the high dose animals was within the historical control limits seen for the strain of mice used. The female mice were given a dose larger than the maximum tolerated dose, as indicated by excessive (30%) weight decrement

compared to concurrent controls, and evidence of mild liver injury (transaminase elevations). The occurrence of a marginal finding at high dose only in animals given an excessive, and somewhat hepatotoxic dose, with no evidence of a carcinogenic effect in rats, male mice, and female mice (given up to 360 mg/kg/day, about 60 times the human dose), and a negative mutagenicity battery is not considered evidence of a carcinogenic potential for Axid.

Axid was not mutagenic in a battery of tests performed to evaluate its potential genetic toxicity, including bacterial mutation tests, unscheduled DNA synthesis, sister chromatid exchange, and the mouse lymphoma assay.

In a two-generation, perinatal and postnatal, fertility study in rats, doses of nizatidine up to 650 mg/kg/day produced no adverse effects on the reproductive performance of parental animals or their progeny.

Pregnancy—Teratogenic Effects—Pregnancy Category C: Oral reproduction studies in rats at doses up to 300 times the human dose, and in Dutch Belted rabbits at doses up to 55 times the human dose, revealed no evidence of impaired fertility or teratogenic effect, but, at a dose equivalent to 300 times the human dose, treated rabbits had abortions, decreased number of live fetuses, and depressed fetal weights. On intravenous administration to pregnant New Zealand White rabbits, nizatidine at 20 mg/kg produced cardiac enlargement, coarctation of the aortic arch, and cutaneous edema in one fetus and at 50 mg/kg it produced ventricular anomaly, distended abdomen, spina bifida, hydrocephaly, and enlarged heart in one fetus. There are, however, no adequate and well-controlled studies in pregnant women. It is also not known whether nizatidine can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Nizatidine should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers: Nizatidine is secreted and concentrated in the milk of lactating rats. Pups reared by treated lactating rats had depressed growth rates. Although no studies have been conducted in lactating women, nizatidine is assumed to be secreted in human milk, and caution should be exercised when nizatidine is administered to nursing mothers.

Pediatric Use: Safety and effectiveness in children have not been established. **Use in Elderly Patients:** Ulcer healing rates in elderly patients are similar to those in younger age groups. The incidence rates of adverse events and laboratory test abnormalities are also similar to those seen in other age groups. Age alone may not be an important factor in the disposition of nizatidine. Elderly patients may have reduced renal function.

Adverse Reactions: Clinical trials of nizatidine included almost 5,000 patients given nizatidine in studies of varying durations. Domestic placebo-controlled trials included over 1,900 patients given nizatidine and over 1,300 given placebo. Among the more common adverse events in the domestic placebo-controlled trials, sweating (1% vs 0.2%), urticaria (0.5% vs <0.01%), and somnolence (2.4% vs 1.3%) were significantly more common in the nizatidine group. A variety of less common events was also reported; it was not possible to

Axid[®] (nizatidine, Lilly)

determine whether these were caused by nizatidine.

Hepatic: Hepatocellular injury, evidenced by elevated liver enzyme tests (SGOT [AST], SGPT [ALT], or alkaline phosphatase), occurred in some patients possibly or probably related to nizatidine. In some cases, there was marked elevation of SGOT, SGPT enzymes (greater than 500 IU/L), and in a single instance, SGPT was greater than 2,000 IU/L. The overall rate of occurrences of elevated liver enzymes and elevations to three times the upper limit of normal, however, did not significantly differ from the rate of liver enzyme abnormalities in placebo-treated patients. All abnormalities were reversible after discontinuation of Axid.

Cardiovascular: In clinical pharmacology studies, short episodes of asymptomatic ventricular tachycardia occurred in two individuals administered Axid and in three untreated subjects.

Endocrine: Clinical pharmacology studies and controlled clinical trials showed no evidence of androgenic activity due to Axid. Impotence and decreased libido were reported with equal frequency by patients who received Axid and by those given placebo. Rare reports of gynecomastia occurred.

Hematologic: Fatal thrombocytopenia was reported in a patient who was treated with Axid and another H₂-receptor antagonist. On previous occasions, this patient had experienced thrombocytopenia while taking other drugs.

Integumental: Sweating and urticaria were reported significantly more frequently in nizatidine than in placebo patients. Rash and exfoliative dermatitis were also reported.

Dther: Hyperuricemia unassociated with gout or nephrolithiasis was reported.

Overdosage: There is little clinical experience with overdosage of Axid in humans. If overdosage occurs, use of activated charcoal, emesis, or lavage should be considered along with clinical monitoring and supportive therapy. Renal dialysis for four to six hours increased plasma clearance by approximately 84%.

Test animals that received large doses of nizatidine have exhibited cholinergic-type effects, including lacrimation, salivation, emesis, miosis, and diarrhea. Single oral doses of 800 mg/kg in dogs and of 1,200 mg/kg in monkeys were not lethal. Intravenous LD₅₀ values in the rat and mouse were 301 mg/kg and 232 mg/kg respectively.

Axid[®] (nizatidine, Lilly)



Eli Lilly and Company
Indianapolis, Indiana
46285

NZ-2903-B-849356 © 1988, ELI LILLY AND COMPANY

NEW MEMBERS

BALL, DAVID KYLE, Jackson. Born New Orleans, Dec. 30, 1957; M.D., University of Mississippi School of Medicine, Jackson, 1984; interned and ob-gyn residency, Tulane Affiliated Hospitals, New Orleans, 1984-88; elected by Central Medical Society.

BUTLER, HARRY LYLE, Laurel. Born Eupora, MS, May 15, 1956; M.D., University of Mississippi School of Medicine, Jackson, 1981; interned, medicine residency, Medical College of Georgia, Augusta, 1981-84; oncology-hematology fellowship, University Medical Center, Jackson, MS, 1985-88; elected by South Mississippi Medical Society.

DODD, J. EDWIN, JR., Jackson. Born Jackson, MS, June 28, 1958; M.D., University of Mississippi School of Medicine, Jackson, 1984; interned, one year, University Medical Center, Jackson; anesthesiology residency, Bowman Gray, Wake Forest University, Winston-Salem, NC, 1986-88; elected by Central Medical Society.

EDMONDSON, HENRY LEE, Starkville. Born Vardaman, MS, May 23, 1957; M.D., University of Mississippi School of Medicine, Jackson, 1985; interned and family medicine residency, University Medical Center, Jackson, 1985-88; elected by Prairie Medical Society.

EGROSHIN, EDWARD, Jackson. Born USSR, July 14, 1944; M.D., 1st Pavlov School of Medicine, Leningrad, USSR, 1969; interned and pathology residency, St. Paul Medical Center, St. Paul, MN, 1981-85; surgical pathology fellowship, Mayo Clinic, Rochester, MN, 1985-87; elected by Central Medical Society.

GOOGE, JIM, New Albany. Born Booneville, MS, Sept. 28, 1959; M.D., University of Mississippi School of Medicine, Jackson, 1985; interned and pediatrics residency, University of South Alabama Medical Center, Mobile, 1985-88; elected by Northeast Mississippi Medical Society.

GRAHAM, BOBBY LEE, JR., Jackson. Born Meridian, MS, Sept. 12, 1957; M.D., University of Mississippi School of Medicine, Jackson, 1983; interned and medicine residency and oncology fellowship, University Medical Center, Jackson, 1983-88; elected by Central Medical Society.

HIRSCH, CATHERINE P., Pascagoula. Born Greenville, MS., Feb. 5, 1956; M.D., University of Mississippi School of Medicine, Jackson, 1983; interned, medicine residency and gastroenterology fellowship, University of Oklahoma, Oklahoma City, 1983-88; elected by Singing River Medical Society.

HOPPER, SAMUEL P., Jackson. Born New Orleans, Feb. 1, 1959; M.D., Tulane University School of Medicine, New Orleans, 1985; interned and pediatrics residency, University of Alabama School of Medicine, Birmingham 1985-88; elected by Central Medical Society.

HUFFMAN, MARK S., Hattiesburg. Born Tulsa, OK, Jan. 27, 1954; M.D., Louisiana State University School of Medicine, New Orleans, 1983; interned and pathology residency, University of Alabama at Birmingham, 1983-88; elected by South Mississippi Medical Society.

JARMON, HENRY M., JR., Meridian. Born Vicksburg, MS, Oct. 29, 1951; M.D., University of Mississippi School of Medicine, Jackson, 1978; interned, general surgery residency and cardiovascular residency, University Medical Center, Jackson, 1978-88; elected by East Mississippi Medical Society.

LEE, DEBORAH T., Brandon. Born Brookhaven, MS, Oct. 6, 1959; M.D., University of Mississippi School of Medicine, Jackson, 1985; interned and pediatrics residency, University Medical Center, Jackson, 1985-88; elected by Central Medical Society.

LOVETT, MARIA M., Columbus. Born McComb, MS, Sept. 13, 1934; M.D., Howard University College of Medicine, Washington, DC, 1974; interned and ob-gyn residency, Howard University Hospital, 1974-79; elected by Prairie Medical Society.

MEGASON, GAIL C., Long Beach. Born Gulfport, MS, Aug. 22, 1954; M.D., University of Mississippi School of Medicine, Jackson, 1985; interned and pediatrics residency, University Medical Center, Jackson, 1985-88; elected by Coast Counties Medical Society.

MILLS, STEPHEN J., Brookhaven. Born Jackson, MS, Dec. 8, 1957; M.D., University of Mississippi School of Medicine, Jackson, 1984; interned and ob-gyn residency, University Medical Center, Jackson, 1984-88; elected by South Central Medical Society.

NEW MEMBERS/Continued

MOSQUERA, LUIS, F., Yazoo City. Born Colombia, July 26, 1947; M.D., University of Panama, 1973; interned, Social Security Hospital; general surgery residency, Gorgas U.S. Army Hospital, Panama, 1975-80; fellowship in surgical oncology, State University of New York, NY; elected by Delta Medical Society.

PHILLIPS, DEIRDRE MELESSA, Jackson. Born Dublin, Ireland, May 8, 1949; M.D., Tulane University School of Medicine, New Orleans, 1973; interned and family practice residency, University Medical Center, Jackson, MS, 1973-76; elected by Central Medical Society.

PRIBIL, STEFAN G., Pascagoula. Born Czechoslovakia, Aug. 10, 1955; M.D., State University of New York at Buffalo School of Medicine, 1980; interned, surgery and neurosurgery residency, University of North Carolina Medical School, Chapel Hill, 1980-86; elected by Singing River Medical Society.

RAILA, FRANK A., Jackson. Born Chicago, July 26, 1925; M.D., Stritch Medical School, Loyola University, Chicago, June 1957; interned, one year, Resurrection Hospital, Chicago; radiology residency, Long Beach VA Medical Center, CA, 1963-66; elected by Central Medical.

ROGERS, WILLIAM B., Amory. Born Altoona, Dec. 29, 1959; M.D., University of Mississippi School of Medicine, Jackson, 1985; interned and medicine residency, University Medical Center, Jackson, 1985-88; elected by Northeast Mississippi Medical Society.

RUSHING, DAVID LEE, Jackson. Born Oxford, MS, Feb. 15, 1958; M.D., University of Mississippi School of Medicine, Jackson, 1984; interned and ob-gyn residency, University Medical Center, Jackson, 1984-88; elected by Central Medical Society.

SESSUMS, JOEY K., Brookhaven. Born Forest, MS, March 20, 1958; M.D., University of Mississippi School of Medicine, Jackson, 1984; interned and ob-gyn residency, Tulane and Charity Hospital, New Orleans, 1984-88; elected by South Central Medical Society.

TOURO INFIRMARY

CENTER FOR CHRONIC PAIN AND DISABILITY REHABILITATION

- Comprehensive combined evaluation and treatment
- 4 to 5 week inpatient program
- Rehab/medication/emotional management
- Preadmission review and interview of all cases
- Accredited by the Commission on Accreditation of Rehabilitation Facilities
- Multi-specialty team selection of consultants
- Weekly reports and conferences
- Physical capacity and work evaluation
- Physican referrals
- 11 years New Orleans experience with 1,400 patients

Referrals/Info

Jackie Chauvet (504) 897-8404

R.H. Morse, M.D.

Medical Director

SIVILS, LARRY W., Jackson. Born Jackson, May 23, 1959; M.D., University of Mississippi School of Medicine, Jackson, 1985; interned and family medicine, University Medical Center, Jackson, 1985-88; elected by Central Medical Society.

SKELTON, THOMAS N., Jackson. Born Jackson, Oct. 25, 1955; M.D., University of Mississippi School of Medicine, Jackson, 1981; interned and medicine residency, University of Texas/Southwestern, Dallas, TX, 1981-84; cardiology fellowship, Duke University Medical Center, Durham, NC, 1984-87; elected by Central Medical Society.

STEWART, REGINALD W., Moss Point. Born Japan, May 1, 1956; D.O., Michigan State University College of Osteopathic Medicine, East Lansing, 1980; interned, Osteopathic Hospital of Detroit, MI, one year; medicine residency, Michigan Osteopathic Medical Center, 1981-84; elected by Singing River Medical Society.

STEPHENS, WM. DANIEL, Gulfport. Born Prentiss, MS, Feb. 23, 1958; M.D., University of Mississippi College of Medicine, Jackson, 1980; interned and medicine residency, Baptist Medical Center, Birmingham, AL, 1984-87; elected by Coast Counties Medical Society.

TUMMINELLO, SAM C., Natchez. Born Natchez, MS, Jan. 17, 1956; M.D., Louisiana State University Medical College, New Orleans, 1982; interned and medicine residency, Medical College of Virginia, Richmond, 1982-85; dermatology residency, University of New Mexico, Albuquerque, NM 1985-88; elected by Homochitto Valley Medical Society.

WARD, JOHN ARTHUR, Starkville. Born Hattiesburg, MS, Jan. 6, 1958; M.D., University of Mississippi College of Medicine, Jackson, 1985; interned and one year medicine residency, University Medical Center, Jackson, and one year medicine residency, University Hospital, Birmingham, AL 1987-88; elected by Prairie Medical Society.

WELLMAN, SAMUEL D., JR., Tupelo. Born Logan, WV, June 9, 1957; M.D., Marshall University School of Medicine, Huntington, WV, 1983; interned, pediatric residency, and neonatology fellowship, University of Louisville, KY, 1983-88; elected by Northeast Mississippi Medical Society.

WILSON, JO PERKINS, Jackson. Born Vicksburg, Feb. 5, 1957; M.D., University of Mississippi School of Medicine, Jackson, 1983; interned and medicine residency and infectious disease fellowship, University Medical Center, Jackson, 1983-88; elected by Central Medical Society.

WITTY, DAVID H., Pascagoula. Born Jackson, MS, Aug. 6, 1957; M.D., University of Mississippi School of Medicine, Jackson, 1983; interned and medicine residency, University of Arkansas, Little Rock, 1983-86; pulmonary fellowship, University of Oklahoma, Oklahoma City, 1986-88; elected by Singing River Medical Society.

CORRECTION: The new members listings in the July issue contained an error. The corrected paragraph follows.

CARR, GARY, Hattiesburg. Born Iuka, MS, March 29, 1954; M.D., University of Mississippi School of Medicine, Jackson, 1984; interned and family practice residency, Anniston Family Practice Program, Anniston, AL, 1984-87; elected by South Mississippi Medical Society.

MEDICAL CLINIC For Sale or Lease

Due to retirement, physician who has been at this location since 1955 wishes to sell or lease medical clinic. All medical equipment, including lab and x-ray, furniture and fixtures included.

2000 square-foot building on 30 × 208.6 lot with parking in the rear. Prime Northeast Jackson location, convenient to area hospitals. Two consultation rooms, three exam rooms, minor surgery room, nurse's office, laboratory and x-ray. Ideal for 2 doctors.

For more information, please contact:

Mr. Jack Lowery
Deposit Guaranty National Bank
Trust Division
601-354-8118

Introducing a new company with an array of services for physicians.

Perhaps you are thinking of adding to your practice and would like:

- A physician to help with the patient load,
- An affiliate in your facility to share costs, or
- A partner until you are ready to retire.

Perhaps you are considering selling your practice and need:

- An assessment of your practice for the purpose of marketing,
- An appraisal of the furnishings, accounts receivables, and good will,
- An individual to act as your agent.

Perhaps you are wondering about the current condition of your practice and need:

- Consultation on accounts receivables,
- Consultation on billing and collections, or
- Help with staff training.

Perhaps you are planning to start a practice and need help:

- Setting it up,
- Acquiring furniture, equipment and supplies,
- Selecting and training your staff.



Frank Cochran

Perhaps you are considering purchasing an existing practice and need:

- Someone with experience to consult with in the process, or
- Someone to act as your agent.

After 11 years of providing the above services for physicians in West Central Alabama, I have decided to serve all physicians in this capacity. I am available and can assist you with these and many other services related to practice management. For more information, please contact me at 205-556-8457.

QUALITY HEALTH RESOURCES

Post Office Box 6002 • Tuscaloosa, Alabama 35405 • (205) 556-8457

A Christian Organization — Operated on Christian principles.

PERSONALS

JAMES ACHORD of UMC spoke at the University of Alabama in Huntsville and was guest lecturer at a VA continuing medical education program in Tuscaloosa.

PAUL ALLEN of Pascagoula recently was recognized at the John Muir Medical Film Festival in California for his three entries on the use of laser surgery to treat gynecological problems.

ORLANDO J. ANDY of UMC served as president of the Southern EEG Society during their June meeting in Nashville.

J. RUSSELL BARNES of Vicksburg has been elected president of the medical staff at Mercy Regional Medical Center. C. NOLEN HUDSON was named president-elect, BARRY HOLCOMB was named chief of the medicine section, and RICHMOND F. SHARBROUGH was elected chief of the surgery section.

BLAIR BATSON of UMC served as an examiner for the American Board of Pediatrics in Seattle, Washington.

MICHAEL J. BOLAND has associated with Internal Medicine Associates of Tupelo for the practice of cardiology.

BERT E. BRADFORD of Brookhaven announces the association of C. MITCH HOLLAND for the practice of pediatrics.

SANDRA F. BURFORD has associated with Family Medicine Clinic, 1907 Mission 66 in Vicksburg.

W. E. CALDWELL announces his retirement as medical director of Blue Cross and Blue Shield of Mississippi, after ten years of service in that post.

C. RON CANNON of Jackson has been inducted as a fellow of the American Society for Laser Medicine and Surgery, Inc.

BRYAN COWAN of UMC conducted a roundtable discussion at the American College of Ob-Gyn meeting in Boston, lectured in Portland, Maine and Shreveport, Louisiana, and was visiting professor in Portsmouth, Virginia.

DON S. DAVIS announces the resumption of his practice of ENT and facial plastic surgery at 5002-Highway 39 North in Meridian.

RALPH DIDLAKE of UMC recently was visiting lecturer at the University of Ottawa in Canada.

J. EDWIN DODD, JR. has associated with Jackson Anesthesia Associates, 508 Medical Arts Building, for the practice of anesthesiology and pain management.

CHARLES W. EMERSON, JR. of Jackson has been named associate medical director of the Mississippi Methodist Rehabilitation Center.

OWEN B. EVANS of UMC was an examiner for the American Board of Psychiatry and Neurology in Kansas City, Missouri.

JOSEPH W. FARINA, JR. has associated with GEOFFREY B. HARTWIG for the practice of neurology at The Hattiesburg Clinic.

ARTHUR N. FOKAKIS has associated with the Hattiesburg office of the Mississippi Asthma and Allergy Clinic, 105 Asbury Circle, in the treatment of asthma and allergic diseases.

GEORGE FURR of Clarksdale recently was honored with a special day of tribute by citizens and civic organizations in Coahoma County.

JOHN GIBSON of UMC lectured at Vanderbilt University's Sonography Symposium in Nashville.

PRINTING — OFFICE SUPPLIES

EQUIPMENT — FURNITURE



Premier Printing Company

2485 West Capitol

Jackson, Mississippi

Phone 352-4091

PERSONALS/Continued

THOMAS S. GLASGOW and WILLIAM A. SPENCER of Oxford announce the association of RICHARD M. GLASGOW in the practice of family medicine at 2161 South Lamar Boulevard.

JIM GOOGE has opened his office for the practice of pediatrics at New Albany Children's Clinic, 301-A Oxford Road.

ALEX J. HAICK, JR. announces the relocation of his office for the practice of general surgery and his association with The Surgical Clinic Associates, 1421 North State Street, Suite 304, in Jackson.

DAVID G. HALL announces the opening of his office for the practice of family medicine at Natchez Medical Clinic, 49 Sergeant Prentiss Street in Natchez.

PATRICK HSU of Greenville announces the closing of his office for the practice of obstetrics and gynecology.

JAMES L. HUGHES of UMC recently lectured on knee surgery in Charleston, South Carolina.

JOHN JACKSON of UMC chaired a cytogenetics committee of the Pediatric Oncology Group in Orlando, Florida, and was a site visitor for the National Cancer Institute in Los Angeles.

SAMUEL JOHNSON of UMC spoke at the Institute for Scientific Research in Boston and at Stanford University in San Francisco.

WILLIAM L. KAHLSTORF of Tupelo recently was elected president of the Mississippi Ob-Gyn Society.

HOWARD LANGFORD of UMC gave the second annual George Entwisle Lecture in Hypertension in Baltimore and made a presentation at the International Society of Hypertension satellite symposium in Kyoto, Japan. He also made a presentation at the 70th Annual Meeting of the Endocrine Society in New Orleans and was keynote speaker at the Canadian Coalition for High Blood Pressure Prevention and Control in Quebec City.

DOUGLAS C. LEAVENGOOD has associated with the Gulf Coast office of Mississippi Asthma and Allergy Clinic, specializing in the treatment of asthma and allergic diseases.

JOHN FAIR LUCAS, JR. of Greenville announces the association of JOHN FAIR LUCAS, III, for the practice of general and vascular surgery at 501 West Washington Street.

DON E. MARASCALCO of Meridian announces the association of JEFFREY N. COOK for the practice of ophthalmology.

PHIL MATHIS of Tupelo recently was installed into the membership of the Society of American Gastrointestinal Endoscopic Surgeons.

JAMES MARTIN of UMC made a presentation at the American College of Obstetricians and Gynecologists meeting in Boston.

HELEN G. MCGEHEE of Waveland has been recertified for membership in the American Academy of Family Physicians.

LYNN B. MCMAHAN of Hattiesburg has been invited to Beijing to lecture at China's first International Conference on Integrated Medicine in Ophthalmology.

CHARLES MONTGOMERY of Tupelo recently was named North Mississippi Medical Center's Physician of the Year.

J. SPENCER MOONEY announces the opening of his office for the practice of otolaryngology and head

TERMS WE THINK YOU'LL LIKE...

Compare these low non-smoker annual rates for non-decreasing graded premium life:

MALE AGES	\$250,000	\$500,000	\$1,000,000
25	250.00	455.00	670.00
30	252.50	460.00	677.50
35	255.00	465.00	685.00
40	330.00	595.00	880.00
45	412.50	760.00	1,127.50
50	542.50	1,015.00	1,510.00
55	810.00	1,520.00	2,267.50
60	1,355.00	2,535.00	3,790.00
65	2,372.50	4,385.00	6,565.00

(smoker's rates slightly higher)

Renewable to age 100. Female rates same as males four years younger. All coverage provided by companies rated "A Excellent" by A.M. Best Co.

For a written quotation and policy description, call or send your date of birth and amount of coverage desired to:



SCHOENFELD
FINANCIAL COMPANIES

2970 COTTAGE HILL ROAD • SUITE 201
MOBILE, ALABAMA 36606
205/471-1340

and neck surgery at 439 North Jackson Street, Brookhaven.

DOYLE MORRISON of Jackson presented the program at the July meeting of the Ostomy Association of Jackson.

FRANCIS S. MORRISON was presented an award as the outgoing president of the South Central Association of Blood Banks at its recent assembly in New Orleans.

JOHN MORRISON of UMC gave grand rounds at Johns Hopkins University in Baltimore and made presentations at the American College of Obstetricians and Gynecologists meeting in Boston.

NORMAN A. NELSON of UMC spoke at recent meetings of the Oxford Rotary Club and Tupelo Medical Auxiliary.

HOWARD NICHOLS of UMC was an examiner for the American Board of Pediatrics in Seattle, Washington and also in Washington, DC.

ROBERT O. PALMER has associated with Columbus Family Health Center, 520 Willowbrook Road, for the practice of oncology.

ANDREW PARENT of UMC presented a paper at the Southern Neurosurgical Society in Hot Springs, Virginia, and at the 16th Annual Scientific Meeting of the International Society of Pediatric Neurosurgeons in Rome. He also spoke at the American Association of Neurological Surgeons meeting in Toronto, Canada.

CARL PASSMAN of Natchez spoke on arthritis and joint replacement at a meeting of the Humana Seniors Association.

MAX L. PHARR of Jackson announces the association of LARRY W. SIVILS for the practice of family medicine at 2916 Old Canton Road.

BILLY MACK PICKERING has joined the South Mississippi Emergency Physicians at Forrest General Hospital.

MICHEL RIVLIN of UMC made a presentation at a meeting of the American College of Obstetricians and Gynecologists in Boston.

ROBERT H. RHODES of UMC presented a paper at the 11th annual Conference on Shock in Chicago and at the Tripartite Meeting of Surgical Research Societies in Bristol, England.

STEFAN PRIBIL announces the opening of his office for the practice of neurological surgery at 4211 Hospital Road in Pascagoula.

SEPTEMBER 1988

CARRY LESS WEIGHT AT THE OFFICE.

The more you have on your mind, the less you should have on your feet. That's why we created DresSports®. Like other dress shoes, they look stylish. Unlike other dress shoes, they're lightweight, flexible, cushioned, and they actually feel good.

After all, your feet shouldn't slow you down on your way up.

Rockport
Marlboro, Mass.



20% Professional Discount

Pennington's Shoes

1151 North State Street

Suite 112

Medical Arts Building

Jackson, Mississippi 39201-2407

Telephone (601) 355-7574

PERSONALS/Continued

WILLIAM ROGERS has associated with Amory Internal Medicine Clinic, 1121 South Boulevard Drive.

JAMES A. SHEFFIELD and R. BRYANT MCCRARY of Gulf Coast Pediatric Clinic, announce the return of PHILLIP C. DEAN.

SAMUEL P. ROBINSON announces the opening of his practice of otolaryngology, head and neck surgery, and facial plastic surgery at 3017 13th Street in Gulfport.

Rush Medical Group announces the association of JOSEPH D. SIEFKER for the practice of otolaryngology and head and neck surgery at 1800 12th Street in Meridian.

N. E. MURILLO SMITH announces the relocation of her practice of family medicine to Decatur in association with OSCAR BRISENO, and her association with Laird Hospital in Union.

ROBERT SMITH of UMC was guest speaker at the annual meeting of the Texas Medical Association in San Antonio.

SUTHIN SONGCHAROEN of Jackson spoke at the August meeting of the Lupus Foundation of America, Central Mississippi Chapter.

ANTONE TANNEHILL of Tupelo recently was named to the Board of Directors of the Mississippi Lung Association.

KATHY JACKSON TEASDALL has associated with Jackson Ear, Nose and Throat Clinic for the practice of otolaryngology and head and neck surgery.

WILLIAM TEW has associated with Lakeland Radiologists, based at St. Dominic Hospital, 971 Lakeland Drive in Jackson.

W. W. WALLEY became the first Waynesboro Rotarian to receive the Paul Harris Fellow Award from the Rotary Foundation.

JOHN WARD has associated with Starkville Internal Medicine Clinic, 104 Doctors Park.

STEVAN WEBSTER of Gulfport announces the association of BHARAT SANGANI for the practice of cardiology at 1110 Broad Avenue.

SAM WELLMAN opened his office for the practice of neonatology in Tupelo in July.

ELBERT A. WHITE has relocated his office for the practice of ophthalmology to the new Eye Clinic, 3302 Smithbridge Road in Corinth.

WINFRED WISER of UMC recently was lecturer at the University of South Alabama.

JOHN D. WOFFORD, JR. of Jackson announces the association of JO PERKINS WILSON and the formation of Infectious Diseases Associates of Jackson, 768 Lakeland Drive.

JAMES S. WOODARD has associated with Internal Medicine Associates, 425 Hospital Drive in Columbus.

ELMER E. YEOMAN announces the opening of his office for the practice of internal medicine at 113 B South 3rd Street in Saltillo.



**We earn
your trust every day.™**



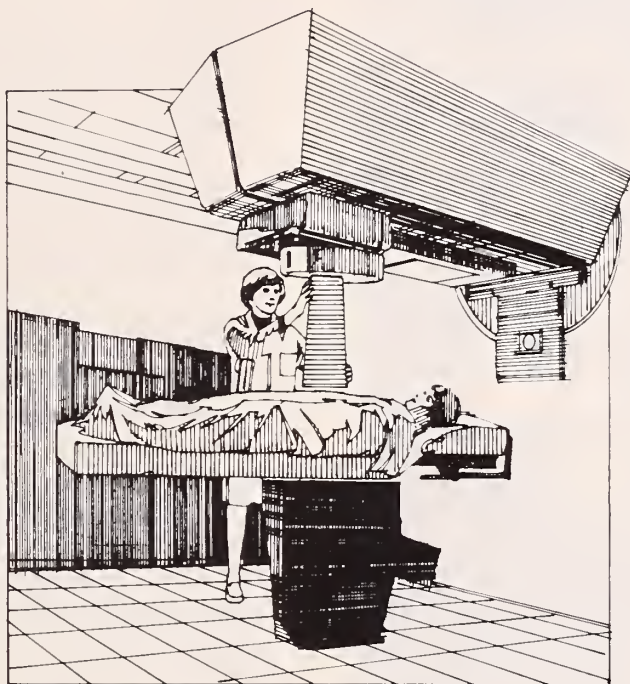
Trustmark™
National Bank

Jackson/Bogue Chitto/Brookhaven/Canton/Clinton/Columbia
Georgetown/Gloster/Greenville/Greenwood/Hattiesburg/Hazlehurst
Leland/Liberty/Madison/Magee/McComb/Pearl/Petal/Ridgeland
Tylertown/Wesson

Member FDIC

Now available to Mississippi State Medical Association members, protection from one of America's leading diseases **CANCER.**

"CANCERPAY PLUS"



- "CancerPay Plus" is a quality cancer policy supplement to your present health insurance.
- Offered by the Mississippi State Medical Association, "CancerPay Plus" provides excellent benefits to physician members of MSMA, their employees and families.
- Reduced rates through Association affiliation
- Payroll deducted with groups as small as one participant.
- Pays in addition to all other insurance, including Medicare.
- Intensive Care and Dread Disease riders available.

For Complete Details of Plan Call or Write:

Scott Shappley

MISSISSIPPI STATE MEDICAL ASSOCIATION

P.O. Box 55509

Jackson, MS 39216

(601) 354-5433 — Watts 1-800-682-6415

YOCON[®]

YOHIMBINE HCl

Description: Yohimbine is a 3a-15a-20B-17a-hydroxy Yohimbine-16a-carboxylic acid methyl ester. The alkaloid is found in Rubiaceae and related trees. Also in Rauwolfia Serpentina (L) Benth. Yohimbine is an indolalkylamine alkaloid with chemical similarity to reserpine. It is a crystalline powder, odorless. Each compressed tablet contains (1/12 gr.) 5.4 mg of Yohimbine Hydrochloride.

Action: Yohimbine blocks presynaptic alpha-2 adrenergic receptors. Its action on peripheral blood vessels resembles that of reserpine, though it is weaker and of short duration. Yohimbine's peripheral autonomic nervous system effect is to increase parasympathetic (cholinergic) and decrease sympathetic (adrenergic) activity. It is to be noted that in male sexual performance, erection is linked to cholinergic activity and to alpha-2 adrenergic blockade which may theoretically result in increased penile inflow, decreased penile outflow or both.

Yohimbine exerts a stimulating action on the mood and may increase anxiety. Such actions have not been adequately studied or related to dosage although they appear to require high doses of the drug. Yohimbine has a mild anti-diuretic action, probably via stimulation of hypothalamic centers and release of posterior pituitary hormone.

Reportedly, Yohimbine exerts no significant influence on cardiac stimulation and other effects mediated by B-adrenergic receptors, its effect on blood pressure, if any, would be to lower it; however no adequate studies are at hand to quantitate this effect in terms of Yohimbine dosage.

Indications: Yocon[®] is indicated as a sympatholytic and mydriatic. It may have activity as an aphrodisiac.

Contraindications: Renal diseases, and patient's sensitive to the drug. In view of the limited and inadequate information at hand, no precise tabulation can be offered of additional contraindications.

Warning: Generally, this drug is not proposed for use in females and certainly must not be used during pregnancy. Neither is this drug proposed for use in pediatric, geriatric or cardio-renal patients with gastric or duodenal ulcer history. Nor should it be used in conjunction with mood-modifying drugs such as antidepressants, or in psychiatric patients in general.

Adverse Reactions: Yohimbine readily penetrates the (CNS) and produces a complex pattern of responses in lower doses than required to produce peripheral a-adrenergic blockade. These include, anti-diuresis, a general picture of central excitation including elevation of blood pressure and heart rate, increased motor activity, irritability and tremor. Sweating, nausea and vomiting are common after parenteral administration of the drug.^{1,2} Also dizziness, headache, skin flushing reported when used orally.^{1,3}

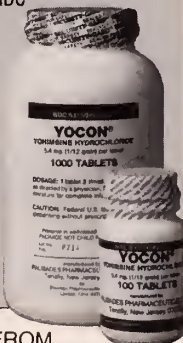
Dosage and Administration: Experimental dosage reported in treatment of erectile impotence.^{1,3,4} 1 tablet (5.4 mg) 3 times a day, to adult males taken orally. Occasional side effects reported with this dosage are nausea, dizziness or nervousness. In the event of side effects dosage to be reduced to 1/2 tablet 3 times a day, followed by gradual increases to 1 tablet 3 times a day. Reported therapy not more than 10 weeks.³

How Supplied: Oral tablets of Yocon[®] 1/12 gr. 5.4 mg in bottles of 100's NDC 53159-001-01 and 1000's NDC 53159-001-10.

References:

1. A. Morales et al., New England Journal of Medicine: 1221. November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

Rev. 1/85



AVAILABLE EXCLUSIVELY FROM
**PALISADES
 PHARMACEUTICALS, INC.**
 219 County Road
 Tenafly, New Jersey 07670
 (201) 569-8502
 Outside NJ 1-800-237-9083

POSTGRADUATE CALENDAR

NEUROSONOLOGY

Sep. 29-Oct. 1

University Medical Center

PEDIATRIC ADVANCED LIFE SUPPORT PROVIDER COURSE

Oct. 13-14

University Medical Center

EIGHTH ANNUAL COMMUNICATIVE DISORDERS SYMPOSIUM: MANAGEMENT OF THE AGING

Nov. 4

University Medical Center

ADVANCED TRAUMA LIFE SUPPORT PROVIDER COURSE

Nov. 10-11

University Medical Center

PEDIATRIC ANNUAL MEETING

MISSISSIPPI CHAPTER OF THE AMERICAN ACADEMY OF PEDIATRICS

Nov. 18-19

BLAIR BATSON APPRECIATION DINNER

A reunion of UMC faculty and residents to honor Dr. Blair Batson, professor of pediatrics and chairman of the department upon the occasion of his retirement.)

Nov. 18

University Medical Center/Ramada Renaissance Hotel, Jackson

For more information or a program brochure, contact the University of Mississippi Medical Center Division of Continuing Health Professional Education, 2500 North State Street, Jackson, Mississippi 39216-4505; or call (601) 984-1300.



MEETINGS

National and Regional

American Medical Association, Annual Meeting, June 18-22, 1989, Chicago. James H. Sammons, Executive Vice President, 535 N. Dearborn St., Chicago, IL 60610.

State and Local

Mississippi State Medical Association, 121st Annual Session, May 31-June 4, 1989, Biloxi. Charles L. Mathews, Executive Secy., 735 Riverside Drive, P.O. Box 5229, Jackson 39216.

Mississippi Academy of Family Physicians, Annual Meeting, Aug. 2-6, 1989, Gulf Shores, AL. Mrs. Alyce Palmore, Executive Secy., P.O. Box 1215 Ridgeland 39158.

Amite-Wilkinson Counties Medical Society, 3rd Monday, March, June, September, December. James S. Poole, Secy., The Gloster Clinic, Gloster 39638. Counties: Amite, Wilkinson.

Central Medical Society, 1st Tuesday, February, April, October, December, 6:30 p.m., Primos Northgate Restaurant, Jackson. Patsy Douglas, Executive Secy., 735 Riverside Dr., Jackson, MS 39202. Counties: Hinds, Leake, Madison, Rankin, Scott, Simpson.

Claiborne County Medical Society, 1st Tuesday, each month, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Secy., P.O. Box 147, Port Gibson 39150. County: Claiborne.

Clarksdale and Six Counties Medical Society, 3rd Wednesday, April, and 1st Wednesday, November, 2:00 P.M., Clarksdale, Rodney Baine, Secy., 110 Yazoo Ave., Clarksdale 38614. Counties: Coahoma, Quitman, Tallahatchie, Tunica.

Coast Counties Medical Society, January, May, and November. H. S. Barrett, Secy., P.O. Box 1810, Gulfport 39501. Counties: Hancock, Harrison, Stone.

Delta Medical Society, 2nd Wednesday, April and October. Walter H. Rose, Secy., 122 E. Baker St., Indianola 38751. Counties: Bolivar, Humphreys, Leflore, Sunflower, Washington, Yazoo.

DeSoto County Medical Society, 3rd Thursday, February and August, 1:00 p.m., Kenny's Restaurant, Hernando. Malcolm D. Baxter, Jr., Secy., Baxter Clinic, Hernando 38632. County: DeSoto.

East Mississippi Medical Society, 1st Tuesday, February, April, June, October, December. Charles L. Wilkinson, Secy., Mail: Ms. Jenkins, P.O. Box 4053, Meridian 39305. Counties: Clarke, Kemper, Lauderdale, Neshoba, Newton, Winston.

Homochitto Valley Medical Society, Meetings scheduled quarterly. Fred G. Emrick, Secy., P.O. Box 1488, Natchez 39120. Counties: Adams, Jefferson.

North Central District Medical Society, 3rd Wednesday, March, June, September, January. George V. Smith, 905 Avent Dr., Grenada 38901. Counties: Attala, Carroll, Choctaw, Granda, Holmes, Montgomery, Webster.

Northeast Mississippi Medical Society, 1st Thursday, March, June, September, December. Roger L. Lowery, Secy., 618 Pegram Dr., Tupelo 38801. Counties: Alcorn, Calhoun, Chickasaw, Itawamba, Lee, Monroe, Pontotoc, Prentiss, Tishomingo, Union.

North Mississippi Medical Society, 1st Thursday, April, September, December. W. A. Spencer, Secy., 2161 South Lamar, Oxford 38655. Counties: Benton, Lafayette, Marshall, Panola, Tate, Tippah, Yalobusha.

Pearl River County Medical Society, 2nd Monday, March, June, September, December. J. C. Griffing, Secy., Crosby Memorial Hospital, Picayune 39466. County: Pearl River.

Prairie Medical Society, 2nd Tuesday, March, June, September, December. Perrin N. Smith, Secy., P.O. Box 9000, Columbus 39705. Counties: Clay, Oktibbeha, Noxubee, Lowndes.

Singing River Medical Society, quarterly, December, March, June and September. John J. McClosky, Secy., 3003 Short Cut Rd., Pascagoula 39567. County: Jackson.

South Central Mississippi Medical Society, 2nd Tuesday, March, June, September, December. Julian T. Janes, Secy., 304 Clark, McComb 39648. Counties: Copiah, Franklin, Lawrence, Lincoln, Pike, Walthall.

South Mississippi Medical Society, 2nd Thursday, March, June, September, December. George R. Bush, Secy., 307 S. 13th Ave., Laurel 39440. Counties: Covington, Forrest, George, Greene, Jasper, Jefferson Davis, Jones, Lamar, Marion, Perry, Smith, Wayne.

West Mississippi Medical Society, 2nd Tuesday, January, March, May, September, October, November, 6:30 p.m., Maxwell's Restaurant, Vicksburg. Wayne M. Petrie, Secy., 1202 Mission Park Dr., Vicksburg 39180. Counties: Issaquena, Sharkey, Warren.

Mississippi Institutions and Organizations Accredited for Continuing Medical Education

The following Mississippi institutions and medical organizations have been accredited in accordance with the "Essentials for Accreditation of Institutions and Organizations Offering Continuing Medical Education Programs" of the Liaison Committee on Continuing Medical Education. Information concerning CME programs for physicians offered by these accredited sources may be obtained by writing the Director, Continuing Medical Education, at the individual institution or organization.

Council on Scientific Assembly
Mississippi State Medical Association
735 Riverside Drive
Jackson, MS 39202

North Mississippi Medical Center
830 Gloster Avenue
Tupelo, MS 38801

Forrest General Hospital
Box 1897
Hattiesburg, MS 39401

Mississippi Baptist Medical Center
1225 N. State Street
Jackson, MS 39201

Gulf Coast Community Hospital
4642 W. Beach Boulevard
Biloxi, MS 39531

Jefferson Davis Memorial Hospital
Box 1488
Natchez, MS 39120

King's Daughter Hospital
Box 948
Brookhaven, MS 39601

Riverside Hospital
Lakeland Drive
Jackson, MS 39208

Biloxi Regional Medical Center
1559 Lafayette St.
Biloxi, MS 39533

Jeff Anderson Regional Medical Center
2124 14th St.
Meridian, MS 39301

Northwest Mississippi Regional Medical Center
Box 1218
Clarksdale, MS 38614

North Panola County Hospital
Drawer 160
Sardis, MS 38666

Singing River Hospital
P.O. Box 112
Pascagoula, MS 39567

Magnolia Hospital
Alcorn Drive
Corinth, MS 38834

Greenwood Leflore Hospital
1508 Leflore Avenue
Greenwood, MS 38930

Gulfport Memorial Hospital
4500 13th Street
Gulfport, MS 39501

Oxford-Lafayette County Hospital
P.O. Box 946
Oxford, MS 38655

St. Dominic-Jackson Memorial Hospital
969 Lakeland Dr.
Jackson, MS 39216

Delta Medical Center
P.O. Box 5247
Crossroads Station
Greenville, MS 39704-5247

Methodist Hospital
P.O. Box 1311
Hattiesburg, MS 39401

New this year . . .

One more reason to join the AMA

Special benefit packages available with 1988 membership



A diverse membership has diverse needs, and the AMA is committed to addressing those needs. This year we're introducing something new when you join the AMA or renew your membership. In your AMA Membership Kit you'll have the opportunity to sign up for one of three *benefit packages* of publications, conferences, participatory panels, focused issue updates, etc., on topics related to the area you designate. Each package is tailored to address your particular interests:

- *Medical and scientific information and education* designed to enhance your practice, profession, and the public health.
- *Representation concentrated specifically on economic concerns*, such as professional liability and third party reimbursement.
- *Representation on a broad range of issues*, including not only economic concerns, but also quality of care, ethical issues, public health, and scientific issues.

If your Preferred Professional Mailing Address should change, please make the change to the right of the address shown. Be sure to retain your membership card.
Use this portion of the card for changes only:

	New Address
	City
	State / Zip
	Telephone

IMPORTANT: In order to receive your full range of membership benefits, you **MUST** return this card.

In addition to my usual benefits, I prefer a specially designed package of publications, topical conferences, participatory panels, focused issue updates, which focus on the following:

(Check only one)

☐ **Medical and Scientific Information and Education** which will enhance my practice, profession, and the health of the public.

☐ **Representation Concentrated Specifically on Economic Concerns** facing my practice and profession, such as professional liability and third-party reimbursement.

☐ **Representation on a Broad Range of Issues** facing my practice and profession, including not only professional liability and third-party reimbursement but also quality of care, ethical issues, public health, scientific issues, etc.

Look for this card in your AMA Membership Kit

To receive your full range of benefits, select one and only one of these free packages by filling out the business reply card in your AMA Membership Kit.

Please look for the card in your AMA Membership Kit and return it promptly. Your new benefit package is one more way the AMA supports you as a physician.

James H. Sammons, MD
Executive Vice President



American Medical Association

535 North Dearborn Street
Chicago, Illinois 60610

PLACEMENT SERVICE

PHYSICIANS AVAILABLE

PHYSICIAN COMPLETING RESIDENCY in obstetrics and gynecology seeks practice opportunity in Mississippi. Available July 1989. Contact Greg Patton, M.D., 2325 Glenmary Avenue #2, Louisville, KY 40204.

EXPERIENCED PHYSICIAN, seeking licensure, wants position as assistant, Location flexible. P.O. Box 225, Bay Springs, MS 39422.

PHYSICIAN completing residency in general surgery, and spouse (board-eligible pediatrician) seek practice opportunities in Mississippi. Location flexible. Contact Dinesh Ranjan, M.D., 2118 Chantilla Rd., Catonsville, Md 21228.

NATIVE MISSISSIPPIAN seeking practice opportunity in Ob-Gyn. Will complete residency and be available in July 1989. Contact Walter Wolfe, M.D. 722 West Austin Dr., Peoria, IL 61614; (309) 655-2000.

PHYSICIAN completing residency in psychiatry seeks practice opportunity in Mississippi. Available July 1989. Contact DeBora Murphy, M.D., P.O. Box 53, Vahalla, NY 10595 or call (914) 592-2710.

PHYSICIANS, THERE ARE TWO KINDS OF FLEXIBILITY IN THE ARMY RESERVE WE THINK YOU'LL LIKE.

One, time. We know how tough it is for a busy physician to make weekend time commitments. So we offer flexible training programs that allow a physician to share some time with his or her country. We arrange a schedule to suit your requirements.

Two, the opportunity to explore other phases of medicine, to add a different kind of knowledge—the challenge of military health care. It's a flexibility which could prove to be both stimulating and rewarding, with the opportunity to participate in a variety of programs that can put you in contact with medical leaders from all over the country.

See how flexible we can be, call our Army Medical Personnel Counselor:

MAJ MEL VAN DYKE
(504) 522-1977/1978

BE ALL YOU CAN BE.
ARMY RESERVE.

PLACEMENT SERVICE/Continued

PHYSICIANS WANTED

EMERGENCY PHYSICIANS WANTED. Part-time and full-time positions in northeast Mississippi. Call (601) 328-8385.

ORTHOPAEDIC SURGEON, UROLOGIST, ENT needed immediately for solo practice in Stuttgart, Arkansas, the Rice and Duck Hunting capital of the world. Modern hospital facilities and equipment. Family oriented community. Excellent schools. Call Jim Bushmaier at (505) 673-3511.

PHYSICIANS NEEDED in Mississippi and other southern states. All specialties needed for both rural and urban locations. Solo and multi-specialty practices available. For further information contact the Lewis Group, 1227 N. Valley Mills, Suite 200, Waco, TX 76710; phone (817) 776-4121.

PHYSICIANS WANTED AND NEEDED: Family Practice, General Surgery, Internal Medicine, OB/GYN. Excellent living conditions, exceptional school system. Terms negotiable with community visit expenses, relocation expenses, office space, guarantee cash flow, interest free line of credit for 12 to 18 months, etc. Other opportunities available. Call or write Richard Manning, Administrator, Tyler Holmes Memorial Hospital, Tyler Holmes Drive, Winona, MS 38967, (601) 283-4114.

LOUISIANA, New Orleans: Director needed for 18k volume ED in 400-bed hospital. Need BC/BP with director experience. Excellent guarantee plus incentive bonus and paid malpractice. Send CV to Jeff Knollman, 444 Chesterfield Center, Suite 230, Chesterfield, MO 63017 or call (314) 537-1282.

PHYSICIANS NEEDED

Physicians (especially specialists such as ophthalmologists, pediatricians, orthopedists, neurologists, etc.) interested in performing consultative evaluations (according to Social Security guidelines) should contact the Medical Relations Office. WATS 1-800-962-2230; Jackson, 922-6811; Martina Mayfield (ext. 2276) or Becky Ruggles (ext. 2300).



DISABILITY DETERMINATION SERVICES
1-800-962-2230

A Commitment to Excellence in Health Care

Mississippi Emergency Association, P.A. (MEA) a physician-owned and managed group has created an environment for physicians that promotes the ideals of private practice while freeing doctors from the administrative and financial demands of the private practitioner.

Board certified or board eligible physicians in the area of Emergency Medicine, Internal Medicine, and Family Medicine are presented a variety of professional and personal rewards, including excellent salaries, benefits, and advancement opportunities.

MEA is a dynamic, growing corporation that delivers quality health care. If you would like to know what career opportunities we can offer you, send your curriculum vitae to Sheila M. Stringer or call (601) 366-6503.

**Mississippi Emergency
Association, P.A.**
P.O. Box 12917
Jackson, MS 39236-2917

CLASSIFIED

FOR RENT: In Jackson at 500-F Woodrow Wilson Drive, 750 sq. ft. office partially furnished with laboratory furniture. Will remodel for long term lease. Only medical or dental professions or related businesses are eligible. Phone (601) 372-6973.

1983 MIDMARK ALL ELECTRIC exam table. Good Condition. \$3,500.00. Call 601/268-5240.

MEDICAL OFFICE SPACE: 1000 sq. ft. office available August 1, 1988. In building with pediatric clinic in rapidly growing northwest Rankin County. Call 992-0110.

X-RAY MACHINE in excellent condition, medical supplies and equipment, waiting room furniture. Best offer. Call (601) 328-0830.

2V STAT STAT STAT STAT STAT STAT
Software and knowledge base for diagnoses and treatment, covering 69 different medical specialties; \$95 for demo disk. The more you know, the better you treat. The most updated medical algorithms at your fingertips! ! 2V MedTech Corporation, 2480 Windy Hill Road, Suite 201, Marietta, GA 33067. (404) 956-1855; Telex 55134/Medvideo.

MSMA's 121st Annual Session

May 31-June 4, 1989

Mark your calendar now

Index to Advertisers

AMA Advisers	13	Palisades Pharmaceuticals	292
CancerPay Plus	291	Pennington's Shoes	289
Disability Determination Service	296	Premier Printing	287
Harreld Chevy-Olds	282	Quality Health Resources	286
Eli Lilly and Co.	282B	Roche Laboratories	third, fourth covers
Medical Administration Publications	9	Schoenfield Co.	288
Medical Assurance Co. of Miss.	second cover	St. Stanislaus School	8
Miss. Emergency Association	296	Touro Infirmary	284
MSMA Benefit Plan and Trust	7	Trustmark	290
Northtowne Printers	280	U. S. Air Force	14
OffiSource	278	U. S. Army	268
		U. S. Army Reserve	4, 282, 295
		U. S. Naval Reserve	281
		Jon Wimbish	15



“When I realized my chances of becoming disabled by age 65 were *three times greater* than the chances of death . . .

I compared disability insurance plans. And I decided that my MSMA-endorsed disability insurance plan

SERVES ME BEST!

It's not group insurance, but an individually-owned policy which is *non-cancellable* and *guaranteed renewable*.”

If you're a member of the Mississippi State Medical Association you may be eligible for this outstanding professional disability plan at *discounted premiums*.

- Non-cancellable, guaranteed renewable
- Medical specialty protection
- Presumptive loss provision
- Indexing of prior earnings
- Waiver of premium
- Cost of living rider
- Future disability insurance option
- Lifetime accident and sickness rider
- Total and residual disability protection

Offered by Paul Revere Insurance Company to MSMA members through its exclusive representatives, Professional Disability Specialists.

Jon B. Wimbish, Disability Specialist

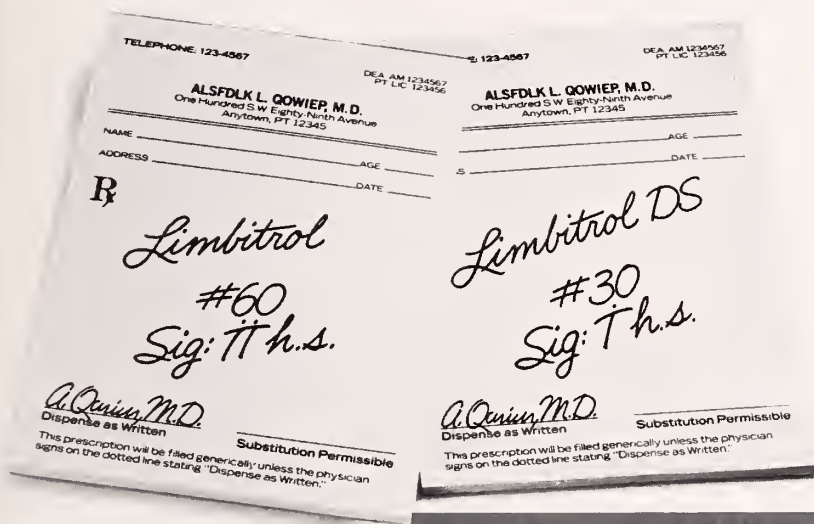
1501 Lakeland Drive, Suite 200

Jackson, MS 39216

Telephone 362-9800

In moderate depression and anxiety

- ➡ 74% of patients experienced improved sleep after the first *h.s.* dose¹
- ➡ First-week improvement in somatic symptoms¹
- ➡ 50% greater improvement with Limbitrol in the first week than with amitriptyline alone²



Protect Your Prescribing Decision:
Specify "Do not substitute."

Limbitrol®

Each tablet contains 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt) (IV)

Limbitrol® DS

Each tablet contains 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt) (IV)

References: 1. Data on file, Hoffmann-La Roche Inc., Nutley, NJ. 2. Feighner VP, et al: *Psychopharmacology* 61:217-225, Mar 22, 1979.

Limbitrol®

Tranquilizer—Antidepressant

Before prescribing, please consult complete product information, a summary of which follows:

Contraindications: Known hypersensitivity to benzodiazepines or tricyclic antidepressants; concomitant use with MAOIs or within 14 days of monoamine oxidase inhibitors (then initiate cautiously, gradually increasing dosage until optimal response is achieved); during acute recovery phase following myocardial infarction.

Warnings: Use with caution in patients with history of urinary retention or angle-closure glaucoma. Severe constipation may occur when used with anticholinergics. Closely supervise cardiovascular patients. Arrhythmias, sinus tachycardia, prolongation of conduction time, myocardial infarction and stroke reported with tricyclic antidepressants, especially in high doses. Caution patients about possible combined effects with alcohol and other CNS depressants and against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving).

Usage in Pregnancy: Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations. Consider possibility of pregnancy when instituting therapy.

Withdrawal symptoms of the barbiturate type have occurred after discontinuation of benzodiazepines (see Drug Abuse and Dependence).

Precautions: Use cautiously in patients with a history of seizures, in hyperthyroid patients, those on thyroid medication, patients with impaired renal or hepatic function. Because of suicidal ideation in depressed patients, do not permit easy access to large quantities of drug. Periodic liver function tests and blood counts recommended during prolonged treatment. Amitriptyline may block action of guanethidine or similar antihypertensives. When tricyclic antidepressants are used concomitantly with cimetidine (Tagamet), clinically significant effects have been reported involving delayed elimination and increasing steady-state concentrations of the tricyclic drugs. Use of Limbitrol with other psychotropic drugs has not been evaluated; sedative effects may be additive. Discontinue several days before surgery. Limit concomitant administration of ECT to essential treatment. See Warnings for precautions about pregnancy. Should not be taken during the nursing period or by children under 12. In elderly and debilitated, limit to smallest effective dosage to preclude ataxia, oversedation, confusion or anticholinergic effects. Inform patients to consult physician before increasing dose or abruptly discontinuing this drug.

Adverse Reactions: Most frequent: drowsiness, dry mouth, constipation, blurred vision, dizziness, bloating. Less frequent: vivid dreams, impotence, tremor, confusion, nasal congestion. Rare: granulocytopenia, jaundice, hepatic dysfunction. Others: many symptoms associated with depression including anorexia, fatigue, weakness, restlessness, lethargy.

Adverse reactions not reported with Limbitrol but reported with one or both components or closely related drugs: **Cardiovascular:** Hypotension, hypertension, tachycardia, palpitations, myocardial infarction, arrhythmias, heart block, stroke. **Psychiatric:** Euphoria, apprehension, poor concentration, delusions, hallucinations, hypomania, increased or decreased libido. **Neurologic:** Incoordination, ataxia, numbness, tingling and paresthesias of the extremities, extrapyramidal symptoms, syncope, changes in EEG patterns. **Anticholinergic:** Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract. **Allergic:** Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus. **Hematologic:** Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia. **Gastrointestinal:** Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, black tongue. **Endocrine:** Testicular swelling, gynecomastia in the male, breast enlargement, galactorrhea and minor menstrual irregularities in the female, elevation and lowering of blood sugar levels, and syndrome of inappropriate ADH (antidiuretic hormone) secretion. **Other:** Headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, jaundice, alopecia, parotid swelling.

Drug Abuse and Dependence: Withdrawal symptoms similar to those noted with barbiturates and alcohol have occurred following abrupt discontinuance of chlordiazepoxide; more severe seen after excessive doses over extended periods; milder after taking continuously at therapeutic levels for several months. Withdrawal symptoms also reported with abrupt amitriptyline discontinuation. Therefore, after extended therapy, avoid abrupt discontinuation and taper dosage. Carefully supervise addiction-prone individuals because of predisposition to habituation and dependence.

Overdosage: Immediately hospitalize patient. Treat symptomatically and supportively. I.V. administration of 1 to 3 mg physostigmine salicylate may reverse symptoms of amitriptyline poisoning. See complete product information for manifestation and treatment.

How Supplied: Double strength (DS) Tablets, white, film-coated, each containing 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt), and Tablets, blue, film-coated, each containing 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt)—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 50.



ROCHE PRODUCTS INC.
Manati, Puerto Rico 00701

In the depressed and anxious patient

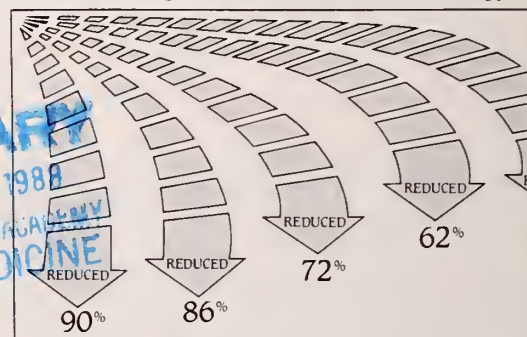
See Improvement In The First Week...¹

And The Weeks That Follow

- ➡ 74% of patients experienced improved sleep after the first *h.s.* dose¹
- ➡ First-week reduction in somatic symptoms¹

Caution patients about the combined effects of Limbitrol with alcohol or other CNS depressants and about activities requiring complete mental alertness, such as operating machinery or driving a car. In general, limit dosage to the lowest effective amount in elderly patients.

Percentage of Reduction in Individual Somatic Symptoms During First Week of Limbitrol Therapy*



VOMITING NAUSEA HEADACHE ANOREXIA CONSTIPATION
*Patients often presented with more than one somatic symptom

Limbitrol[®]

Each tablet contains 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt) (IV)

Limbitrol DS[®]

Each tablet contains 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt) (IV)

Copyright © 1988 by Roche Products Inc. All rights reserved.
Please see summary of product information inside back cover.



N.Y. ACADEMY OF MED
2 E 103RD ST
NEW YORK NY 10029-3207

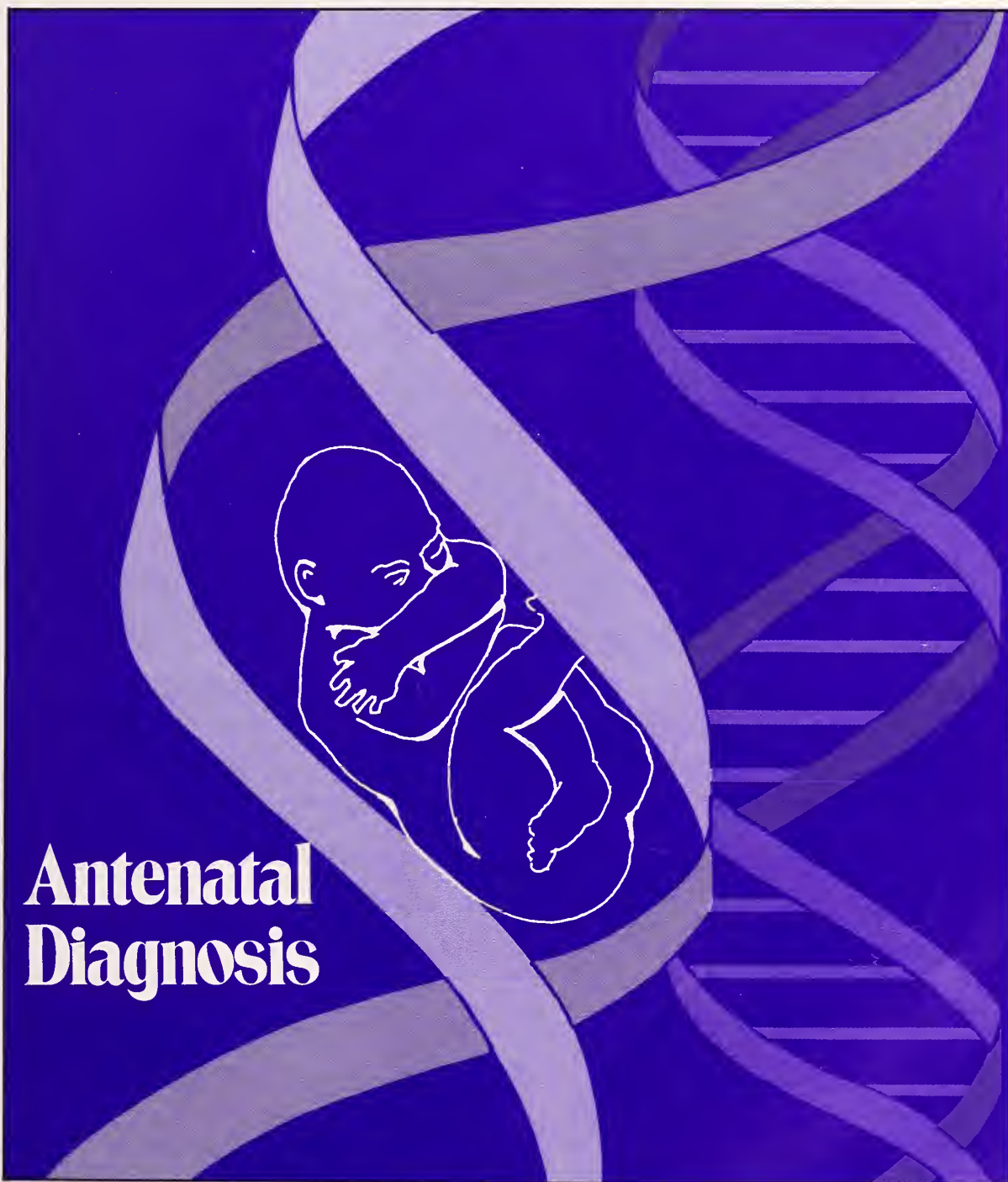
JOURNAL



OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION

OCTOBER

1988



**Antenatal
Diagnosis**

There is strength in numbers. (And our numbers are growing.)



Seated, Left to Right: Cheryl Maxwell (Claims Secretary), Lisa Noble (Underwriting Secretary), Maria Graham (Claims Secretary), Kim Ormond (Receptionist), Mike Houpt (General Manager), and C.G. "Tanny" Sutherland, M.D. (Medical Director)

Standing, Left to Right: C.R. "Bob" Montgomery (General Counsel), Lisa Stewart (Underwriting Secretary), Sharon Thompson (Claims Secretary), Craig Brown (Underwriting Manager), Joey Grimes (Controller), Chuck Dunn (Assistant General Manager), and Debbie Sutherland (Bookkeeper)

Since we wrote our first policy in November of 1977, we have grown to serve more physicians than any other medical liability insurance company in Mississippi.

Why do more physicians turn to Medical Assurance Company? Our staff has grown from two in 1978 to five in 1983 to twelve in 1988, and we have plans for additional staff even now. We have insurance professionals who can provide efficient and cost-effective

answers to your medical liability insurance questions. We serve more than 1800 Mississippi doctors – providing savings and financial strength through a program of sound investments and underwriting guidelines. Every claim is reviewed by a panel of medical and legal claims experts.

So call or come visit our staff at our offices on Riverside Drive. Let us show you *our* strength in numbers.



Medical Assurance Company of Mississippi

Street Address: Suite 301
735 Riverside Drive, Jackson, MS
Phone: (601) 353-2000

Mailing Address: P.O. Box 4915, Jackson, MS 39216-0915
MS WATS: 1-800-325-4172

JOURNAL

OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION

OCTOBER 1988

VOLUME XXIX

NUMBER 10

SCIENTIFIC

- Right Ventricular Myocardial Infarction** 297

Bruce Atkinson, M.D.

- Effective Palliation of Metastatic Adenocarcinoma to the Liver: A Case Report** 301

*R. Arnold Smith, M.D.,
G. Crawley Stubblefield, M.D., and
Morris T. Reagan, M.D.*

- Antenatal Diagnosis for the Clinician** 307

Allan T. Bombard, M.D.

EDITORIALS

- Strategic Planning Project: A Preliminary Report** 312

David R. Steckler, M.D.

- About . . . Face!** 313

Joseph E. Johnston, M.D.

EDITOR

Myron W. Lockey, M.D.

EDITOR EMERITUS

W. Moncure Dabney, M.D.

ASSOCIATE EDITORS

George E. Abraham, M.D.

Joseph E. Johnston, M.D.

MANAGING EDITOR

Patsy Silver

PUBLICATIONS COMMITTEE

Richard C. Miller, M.D.,
Chairman

George H. Martin, M.D.

William J. Gibson, M.D.
and the editors

THE ASSOCIATION

David R. Steckler, M.D.
President

J. Ed Hill, M.D.
President-Elect

Don Q. Mitchell, M.D.
Secretary-Treasurer

James C. Waites, M.D.
Speaker

H. Vann Craig, M.D.
Vice Speaker

Charles L. Mathews
Executive Director

DEPARTMENTS

- Medico-Legal Brief** 313

- Letters** 314

- Medical Organization** 315

- Postgraduate Calendar** 324

- Personals** 327

- Deaths** 329

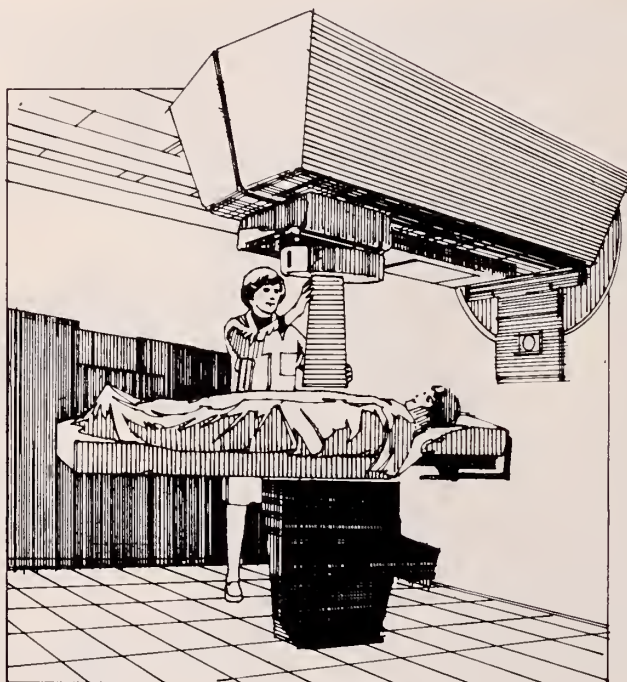
- Placement Service** 331

Copyright© 1988, Mississippi State Medical Association. The views expressed in this publication reflect the opinions of the authors and do not necessarily state the opinions or policies of the Mississippi State Medical Association.

THE JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION (ISSN 0026-6393) is owned and published monthly by the Mississippi State Medical Association, founded 1856, at 735 Riverside Drive, Jackson, Mississippi 39202. Subscription rate, \$25.00 per annum; \$35.00 per annum for foreign subscriptions; \$2.25 per copy, as available. Advertising rates furnished on request. Printed by The Ovid Bell Press, Inc., Fulton, Missouri. Second-class postage paid at Jackson, Mississippi, and at additional mailing offices. POSTMASTER: Send address changes to Mississippi State Medical Association, P.O. Box 5229, Jackson, Mississippi 39216.

Now available to Mississippi State Medical Association members, protection from one of America's leading diseases **CANCER.**

"CANCERPAY PLUS"



- "CancerPay Plus" is a quality cancer policy supplement to your present health insurance.
- Offered by the Mississippi State Medical Association, "CancerPay Plus" provides excellent benefits to physician members of MSMA, their employees and families.
- Reduced rates through Association affiliation
- Payroll deducted with groups as small as one participant.
- Pays in addition to all other insurance, including Medicare.
- Intensive Care and Dread Disease riders available.

For Complete Details of Plan Call or Write:

Scott Shappley

MISSISSIPPI STATE MEDICAL ASSOCIATION

P.O. Box 55509

Jackson, MS 39216

(601) 354-5433 — Watts 1-800-682-6415

NEWSLETTER

October 1988

Dear Doctor:

The National Heart, Lung and Blood Institute has made available the "1988 Report of the Joint National Committee on Detection, Evaluation, and Treatment of High Blood Pressure (JNC IV)." The report expands the 1984 recommendations for controlling hypertension. It translates to medical practice the latest clinical trials; addresses the needs of special populations; examines factors influencing the cost of care; and provides additional guidelines for managing high blood pressure in the presence of cardiovascular diseases and other coexisting medical conditions.

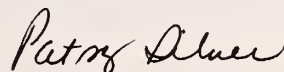
A copy of JNC IV may be obtained free of charge by contacting: National High Blood Pressure Education Program, Information Center, 4733 Bethesda Avenue, Suite 530, Bethesda, MD 20814; phone (301) 951-3260.

Dr. Eric McVey of Jackson and Dr. Mal Morgan of Natchez are representing MSMA on a Mississippi Hospital Association committee of physicians, nurses and administrators, which will study and recommend solutions to the "bedside nursing" crisis.

Your "MSMA Report" of September 23 included a list of vacancies in MSMA offices which will be filled during elections at the upcoming 1989 Annual Session. Names of nominees for these vacancies should be submitted to the member of the nominating committee from your association district. You may also send names of nominees to the Chairman, Nominating Committee, P.O. Box 5229, Jackson, MS 39296-5229.

Your MSMA Council on Scientific Assembly and the Medicine and Surgery Planning Groups met last month to begin planning for the 1989 Annual Session. More details about the meeting will be announced later. Be sure to put the dates on your calendar and plan to attend the 121st Annual Session, May 31-June 4, 1989, in Biloxi.

Sincerely,



Patsy Silver
Managing Editor

Now Available

The Health Policy Agenda for the American People

A Comprehensive Framework for the Future

The Health Policy Agenda for the American People (HPA) has issued its Summary and Final Reports recommending guidelines for the future of our health care system. This landmark effort covers a wide subject area and establishes a comprehensive, long-term framework for the U.S. health policy into the 21st century.

Representatives of the health professions, insurers, health care institutions, consumer organizations, business groups, and the government collaborated for five years to develop recommendations. Learn what the HPA has recommended on your behalf...and how it will affect your future. Order your copies of the HPA Summary and Final Reports now and join in the partnership for a healthier America. Simply complete the coupon or call toll-free 1-800-621-8335. In Illinois call collect 312 645-4987.

Order Form

Please send me _____ copies of
the HPA Summary and Final Reports (OP-207) at \$35 for the two volume set. Subtotal _____
Sales tax (IL, NY residents) _____
Total _____

Return form with payment to: *The Health Policy Agenda for the American People*
P.O. Box 10946, Chicago, Illinois 60610-0946, Order No. OP-207

Name _____

Address _____

City _____

State _____ Zip _____

Please charge my: ☐ VISA ☐ MASTERCARD

Credit Card Number _____

Expiration Date _____

Signature _____

Phone _____

Payment must accompany order. Please allow 4-6 weeks for delivery.
For information on bulk purchases, please call 312/280-7168.

"A Sign of the Times!"



SALES — SERVICE — LEASING

HARRELD CHEVY-OLDS

Call Toll-free 1-800-451-3908



(ciprofloxacin HCl/Miles)



A REVOLUTIONARY ORAL ANTIMICROBIAL WITH THE POWER OF PARENTERALS

- Highly active *in vitro* against a broad range of gram-positive and gram-negative pathogens, including methicillin-resistant *Staphylococcus aureus* and *Pseudomonas aeruginosa**
- For treatment of infections in the:
 - lower respiratory tract[†]
 - urinary tract[†]
 - skin/skin structure[†]
 - bones and joints[†]
- Convenient *B.I.D.* dosage – 250 mg, 500 mg and 750 mg tablets

**In vitro* activity does not necessarily imply a correlation with *in vivo* results.

[†]Due to susceptible strains of indicated pathogens. See indicated organisms in Brief Summary.

CIPRO® SHOULD NOT BE USED IN CHILDREN OR PREGNANT WOMEN.

A history of hypersensitivity to ciprofloxacin is a contraindication to its use. A history of hypersensitivity to other quinolones may also contraindicate the use of ciprofloxacin.



Miles Inc.
Pharmaceutical Division
400 Morgan Lane
West Haven, CT 06516

Please see adjacent page of this advertisement for Brief Summary of Prescribing Information.



■ 500 mg *B.I.D.* for most infections;
750 mg *B.I.D.* for severe or complicated infections.

BRIEF SUMMARY CONSULT PACKAGE INSERT FOR FULL PRESCRIBING INFORMATION INDICATIONS AND USAGE

Cipro[®] is indicated for the treatment of infections caused by susceptible strains of the designated microorganisms in the conditions listed below

Lower Respiratory Infections caused by *Escherichia coli*, *Klebsiella pneumoniae*, *Enterobacter cloacae*, *Proteus mirabilis*, *Pseudomonas aeruginosa*, *Haemophilus influenzae*, *Haemophilus parainfluenzae*, and *Streptococcus pneumoniae*

Skin and Skin Structure Infections caused by *Escherichia coli*, *Klebsiella pneumoniae*, *Enterobacter cloacae*, *Proteus mirabilis*, *Proteus vulgaris*, *Providencia stuartii*, *Morganella morganii*, *Citrobacter freundii*, *Pseudomonas aeruginosa*, *Staphylococcus epidermidis* (penicillinase and nonpenicillinase-producing strains), *Staphylococcus epidermidis*, and *Streptococcus pyogenes*

Bone and Joint Infections caused by *Enterobacter cloacae*, *Serratia marcescens*, and *Pseudomonas aeruginosa*

Urinary Tract Infections caused by *Escherichia coli*, *Klebsiella pneumoniae*, *Enterobacter cloacae*, *Serratia marcescens*, *Proteus mirabilis*, *Providencia rettgeri*, *Morganella morganii*, *Citrobacter diversus*, *Citrobacter freundii*, *Pseudomonas aeruginosa*, *Staphylococcus epidermidis*, and *Streptococcus faecalis*

Infectious Diarrhea caused by *Escherichia coli* (enterotoxigenic strains), *Campylobacter jejuni*, *Shigella flexneri*,^{*} and *Shigella sonnei*^{*} when antibacterial therapy is indicated

^{*}Efficacy for this organism in this organ system was studied in fewer than 10 infections

Appropriate culture and susceptibility tests should be performed before treatment in order to isolate and identify organisms causing infection and to determine their susceptibility to ciprofloxacin. Therapy with Cipro[®] may be initiated before results of these tests are known, once results become available appropriate therapy should be continued. As with other drugs, some strains of *Pseudomonas aeruginosa* may develop resistance fairly rapidly during treatment with ciprofloxacin. Culture and susceptibility testing performed periodically during therapy will provide information not only on the therapeutic effect of the antimicrobial agent but also on the possible emergence of bacterial resistance.

CONTRAINDICATIONS

A history of hypersensitivity to ciprofloxacin is a contraindication to its use. A history of hypersensitivity to other quinolones may also contraindicate the use of ciprofloxacin.

WARNINGS

CIPROFLOXACIN SHOULD NOT BE USED IN CHILDREN OR PREGNANT WOMEN. The oral administration of ciprofloxacin caused lameness in immature dogs. Histopathological examination of the weight-bearing joints of these dogs revealed permanent lesions of the cartilage. Related drugs such as nalidixic acid, cinoxacin, and norfloxacin also produced erosions of cartilage of weight-bearing joints and other signs of arthropathy in immature animals of various species (SEE ANIMAL PHARMACOLOGY SECTION IN FULL PRESCRIBING INFORMATION).

PRECAUTIONS

General

As with other quinolones, ciprofloxacin may cause central nervous system (CNS) stimulation, which may lead to tremor, restlessness, lightheadedness, confusion, and very rarely to hallucinations or convulsive seizures. Therefore, ciprofloxacin should be used with caution in patients with known or suspected CNS disorders, such as severe cerebral arteriosclerosis or epilepsy, or other factors which predispose to seizures (SEE ADVERSE REACTIONS).

Crystals of ciprofloxacin have been observed rarely in the urine of human subjects but more frequently in the urine of laboratory animals. Crystalluria related to ciprofloxacin has been reported only rarely in man, because human urine is usually acidic. Patients receiving ciprofloxacin should be well hydrated, and alkalinity of the urine should be avoided. The recommended daily dose should not be exceeded. Alteration of the dosage regimen is necessary for patients with impairment of renal function (SEE DOSAGE AND ADMINISTRATION SECTION IN FULL PRESCRIBING INFORMATION).

Drug Interactions

Concurrent administration of ciprofloxacin with theophylline may lead to elevated plasma concentrations of theophylline and prolongation of its elimination half-life. This may result in increased risk of theophylline-related adverse reactions. If concomitant use cannot be avoided, plasma levels of theophylline should be monitored and dosage adjustments made as appropriate.

Antacids containing magnesium hydroxide or aluminum hydroxide may interfere with the absorption of ciprofloxacin, resulting in serum and urine levels lower than desired; concurrent administration of these agents with ciprofloxacin should be avoided.

Probenecid interferes with the renal tubular secretion of ciprofloxacin and produces an increase in the level of ciprofloxacin in the serum. This should be considered if patients are receiving both drugs concomitantly.

As with other broad-spectrum antibiotics, prolonged use of ciprofloxacin may result in overgrowth of nonsusceptible organisms. Repeated evaluation of the patient's condition and microbial susceptibility testing is essential. If superinfection occurs during therapy, appropriate measures should be taken.

Information for Patients

Patients should be advised that ciprofloxacin may be taken with or without meals. The preferred time of dosing is two hours after a meal. Patients should also be advised to drink fluids liberally and not take antacids containing magnesium or aluminum concomitantly or within two hours after dosing. Ciprofloxacin may cause dizziness or lightheadedness; therefore patients should know how they react to this drug before they operate an automobile or machinery or engage in activities requiring mental alertness or coordination.

Carcinogenesis, Mutagenesis, Impairment of Fertility

Eight *in vitro* mutagenicity tests have been conducted with ciprofloxacin and the test results are listed below.

- Salmonella/Microsome Test (Negative)
- E. coli* DNA Repair Assay (Negative)
- Mouse Lymphoma Cell Forward Mutation Assay (Positive)
- Chinese Hamster V₇₉ Cell HGPRT Test (Negative)
- Syrian Hamster Embryo Cell Transformation Assay (Negative)
- Saccharomyces cerevisiae* Point Mutation Assay (Negative)
- Saccharomyces cerevisiae* Mitotic Crossover and Gene Conversion Assay (Negative)
- Rat Hepatocyte DNA Repair Assay (Positive)

Thus, two of the eight tests were positive, but the following three *in vivo* test systems gave negative results.

- Rat Hepatocyte DNA Repair Assay
- Micronucleus Test (Mice)
- Dominant Lethal Test (Mice)

Long term carcinogenicity studies in animals have not yet been completed.

Pregnancy - Pregnancy Category C

Reproduction studies have been performed in rats and mice at doses up to six times the usual daily human dose and have revealed no evidence of impaired fertility or harm to the fetus due to ciprofloxacin. In rabbits, as with most antimicrobial agents, ciprofloxacin (30 and 100 mg/kg orally) produced gastrointestinal disturbances resulting in maternal weight loss and an increased incidence of abortion. No teratogenicity was observed at either dose. After intravenous administration, at doses up to 20 mg/kg, no maternal toxicity was produced, and no embryotoxicity or teratogenicity was observed. There are, however, no adequate and well-controlled studies in

CONVENIENT *B.I.D.* DOSAGE

Recommended dosage schedule

Infection Site*	Severity of Infection	Dosage
Respiratory Tract*	Mild/Moderate	500 mg <i>B.I.D.</i>
Bone and Joint*	Severe/Complicated	750 mg <i>B.I.D.</i>
Skin/Skin Structure*	Mild/Moderate	250 mg <i>B.I.D.</i>
Urinary Tract*	Severe/Complicated	500 mg <i>B.I.D.</i>
Infectious Diarrhea*	Mild/Moderate/Severe	500 mg <i>B.I.D.</i>

pregnant women. SINCE CIPROFLOXACIN, LIKE OTHER DRUGS IN ITS CLASS, CAUSES ARTHROPATHY IN IMMATURE ANIMALS, IT SHOULD NOT BE USED IN PREGNANT WOMEN (SEE WARNINGS).

Nursing Mothers

It is not known whether ciprofloxacin is excreted in human milk, however, it is known that ciprofloxacin is excreted in the milk of lactating rats and that other drugs of this class are excreted in human milk. Because of this, and because of the potential for serious adverse reactions from ciprofloxacin in nursing infants, a decision should be made to discontinue nursing or to discontinue the drug, taking into account the importance of the drug to the mother.

Pediatric Use

Ciprofloxacin should not be used in children because it causes arthropathy in immature animals (SEE WARNINGS).

ADVERSE REACTIONS

Ciprofloxacin is generally well tolerated. During clinical investigation, 2,799 patients received 2,868 courses of the drug. Adverse events that were considered likely to be drug related occurred in 7.3% of courses, possibly related in 9.2%, and remotely related in 3.0%. Ciprofloxacin was discontinued because of an adverse event in 3.5% of courses, primarily involving the gastrointestinal system (1.5%), skin (0.6%), and central nervous system (0.4%).

The most frequently reported events, drug related or not, were nausea (5.2%), diarrhea (2.3%), vomiting (2.0%), abdominal pain/discomfort (1.7%), headache (1.2%), restlessness (1.1%), and rash (1.1%).

Additional events that occurred in less than 1% of ciprofloxacin courses are listed below. Those typical of quinolones are italicized.

GASTROINTESTINAL (See above), painful oral mucosa, oral candidiasis, dysphagia, intestinal perforation, gastrointestinal bleeding.

CENTRAL NERVOUS SYSTEM (See above), dizziness, lightheadedness, insomnia, nightmares, hallucinations, manic reaction, irritability, tremor, ataxia, convulsive seizures, lethargy, drowsiness, weakness, malaise, anorexia, phobia, depersonalization, depression, paresthesia.

SKIN/HYPERSENSITIVITY (See above), pruritus, urticaria, photosensitivity, flushing, fever, chills, angioedema, edema of the face, neck, lips, conjunctivae or hands, cutaneous candidiasis, hyperpigmentation, erythema nodosum.

SPECIAL SENSES blurred vision, disturbed vision, (change in color perception, overbrightness of lights), decreased visual acuity, diplopia, eye pain, tinnitus, bad taste.

MUSCULOSKELETAL joint or back pain, joint stiffness, achiness, neck or chest pain, flare-up of gout.

RENAL/UROGENITAL interstitial nephritis, renal failure, polyuria, urinary retention, urethral bleeding, vaginitis, acidosis.

CARDIOVASCULAR palpitations, atrial flutter, ventricular ectopy, syncope, hypertension, angina pectoris, myocardial infarction, cardiopulmonary arrest, cerebral thrombosis.

RESPIRATORY epistaxis, laryngeal or pulmonary edema, hiccough, hemoptysis, dyspnea, bronchospasm, pulmonary embolism.

Most of these events were described as only mild or moderate in severity, abated soon after the drug was discontinued, and required no treatment.

In several instances, nausea, vomiting, tremor, restlessness, agitation, or palpitations were judged by investigators to be related to elevated plasma levels of theophylline possibly as a result of a drug interaction with ciprofloxacin.

Adverse Laboratory Changes Changes in laboratory parameters listed as adverse events without regard to drug relationship:

Hepatic - Elevations of ALT (SGPT) (1.9%), AST (SGOT) (1.7%), alkaline phosphatase (0.8%), LDH (0.4%), serum bilirubin (0.3%).

Hematologic - eosinophilia (0.6%), leukopenia (0.4%), decreased blood platelets (0.1%), elevated blood platelets (0.1%), pancytopenia (0.1%).

Renal - Elevations of Serum creatinine (1.1%), BUN (0.9%).

CRYSTALLURIA, CYLINDRURIA, AND HEMATURIA HAVE BEEN REPORTED.

Other changes occurring in less than 0.1% of courses were: Elevation of serum gammaglutamyl transferase, elevation of serum amylase, reduction in blood glucose, elevated uric acid, decrease in hemoglobin, anemia, bleeding diathesis, increase in blood monocytes, and leukocytosis.

OVERDOSAGE

Information on overdosage in humans is not available. In the event of acute overdosage, the stomach should be emptied by inducing vomiting or by gastric lavage. The patient should be carefully observed and given supportive treatment. Adequate hydration must be maintained. In the event of serious toxic reactions from overdosage, hemodialysis or peritoneal dialysis may aid in the removal of ciprofloxacin from the body, particularly if renal function is compromised.

DOSAGE AND ADMINISTRATION

The usual adult dosage for patients with urinary tract infections is 250 mg every 12 hours. For patients with complicated infections caused by organisms not highly susceptible, 500 mg may be administered every 12 hours.

Respiratory tract infections, skin and skin structure infections, and bone and joint infections may be treated with 500 mg every 12 hours. For more severe or complicated infections, a dosage of 750 mg may be given every 12 hours.

HOW SUPPLIED

Cipro[®] (ciprofloxacin HCl/Miles) is available as tablets of 250 mg, 500 mg, and 750 mg in bottles of 50, and in Unit-Dose packages of 100 (SEE FULL PRESCRIBING INFORMATION FOR COMPLETE INFORMATION).

^{*} Due to susceptible strains of indicated pathogens. See indicated organisms in Brief Summary.

For further information, contact the Miles Information Service:

1-800-642-4776. In VA, call collect: 703-391-7888.

COMMITTED TO THERAPEUTIC EFFICIENCY



Miles Inc.
Pharmaceutical Division
400 Morgan Lane
West Haven, CT 06516

TELL YOUR PATIENTS THEIR CHOLESTEROL NUMBER... BEFORE THEY ASK.

Reducing high blood cholesterol reduces the risk of heart disease. That's why we're telling Americans—through a national public service advertising campaign—to know their cholesterol number. Your patients may soon be asking you for their number and what it means.

And when they do, we can help. The National Cholesterol Education Program, administered by the National Heart, Lung, and Blood Institute, has developed adult treatment guidelines to help you identify high-risk patients and use the appropriate diet and/or drug therapy for those with elevated cholesterol levels.

Help your patients reduce their risk of heart disease. For a free copy of the *Report of the Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults*, complete the form below.

Name _____
Specialty _____
Address _____
City _____ State _____ Zip _____

Mail to: Cholesterol Adult Treatment Guidelines
National Cholesterol Education Program
National Heart, Lung, and Blood Institute
C-200-GA
Bethesda, MD 20892



NATIONAL CHOLESTEROL EDUCATION PROGRAM
NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

National Institutes of Health • Public Health Service • U.S. Department of Health and Human Services

THE ARMY RESERVE OFFERS NEW FINANCIAL INCENTIVES FOR RESIDENTS.



If you are a resident in Anesthesiology or Surgery*, the Army Reserve has a new and exciting opportunity for you. The new Specialized Training Assistance Program will provide you with financial incentives while you're training in one of these specialties.

Here's how the program can work for you. If you qualify, you may be selected to participate in the Specialized Training Program. You'll serve in a local Army Reserve medical unit with flexible scheduling so it won't interfere with your residency

training, and in addition to your regular monthly Reserve pay, you'll receive a stipend of \$678 a month.

You'll also have the opportunity to practice your specialty for two weeks a year at one of the Army's prestigious Medical Centers.

Find out more about the Army Reserve's new Specialized Training Assistance Program.

Call or write your US Army Medical Department Reserve Personnel Counselor:

**ARMY RESERVE MEDICINE
2100 16th AVE. SOUTH
SUITE 303
BIRMINGHAM, AL 35205
(205) 930-9719 COLLECT**

* General, Orthopaedic, Neuro, Colon/Rectal, Cardio/Thoracic, Pediatric, Peripheral/Vascular, or Plastic Surgery.

ARMY RESERVE MEDICINE. BE ALL YOU CAN BE.

DATELINE

MSMA House of Delegates
To Meet In Special Session

Jackson, MS - At the direction of the MSMA Board of Trustees, the House of Delegates will meet in a special session in Jackson on Wednesday, January 18. The session will deal with legislative matters and will conclude with a meeting with state legislators. More information will be provided later, but members are urged to mark the date on their calendars now.

AMA Will Study
Harvard RVS

Chicago, IL - At press time, the long-awaited Harvard study of relative values of various medical services was due to be released. The AMA has retained independent consultants to review and comment on the RVS, and will hold meetings with state and specialty society representatives in November. The AMA House of Delegates will consider the RVS at its December interim meeting.

Sales Tax Required
On Out of State Purchases

Jackson, MS - The Mississippi State Tax Commission is seeking to enforce sales tax requirements on all goods purchased out of state. Legend drugs are excluded from the requirements, but physicians are urged to be aware of sales tax requirements on all other goods purchased out of state. The Tax Commission plans to make collections retroactively.

Strategic Planning
Is Underway

Jackson, MS - More than 75% of the MSMA membership has responded to a survey being conducted as part of a strategic planning project for organized medicine in Mississippi, i.e., MSMA, MACM, MFMC and the MS Physicians Health Insurance Company. The survey seeks to identify major issues facing medicine and to evaluate the effectiveness of current programs and services.

Heterosexual AIDS Case Rate
Keeping Pace With Other Groups

Chicago, IL - AIDS is not sweeping through the U.S. heterosexual population, but reported cases of AIDS spread through heterosexual contact have kept pace with infection rates among other groups, says a report in the October 7 JAMA. Intravenous drug use is cited as a key factor. The report says that health officials and funding agencies must assume and prepare for the worst.

Counsel to Authors

THE JOURNAL welcomes manuscripts which should be submitted to the Editors at 735 Riverside Drive, Jackson, MS 39216, in original and at least one duplicate copy. They must be typewritten double spaced on 8½ by 11-inch white paper. **Brief manuscripts (about 2,500 words or 8 pages) will be given preference over longer articles.**

The author is responsible for all statements made in his work, including changes made by the manuscript editor. Manuscripts are received with the understanding that they are not under simultaneous consideration by any other publication and have not been previously published. All manuscripts will be acknowledged, and while those rejected are generally returned to the author, the JOURNAL is not responsible in event of loss. Manuscripts accepted for publication become the property of the JOURNAL and are copyrighted by the association when published. They may not be published elsewhere without written release and permission from both the JOURNAL and the author.

All copy must be double spaced, including legends, footnotes, and references. Generous margins at the top, bottom, and on both sides of the page should be allowed. Each page after the title page should be consecutively numbered and carry a running head identifying the paper and author.

Titles should be short, specific, and clear. Ordinarily, a title should not exceed 80 characters, including punctuation.

References should be limited to a maximum of 10. If there are more than 10, the references will be omitted and a notation made to write the author for a complete list. Textbooks, personal communications, and unpublished data may not be cited as references. References must include names of authors, complete title cited, name of journal or book spelled out or abbreviated according to the *Index Medicus*, volume number, first and last page numbers, month, date (if published more frequently than monthly), and year. References should be arranged according to order listed in the text and must be numbered consecutively.

Manuscripts accepted for publication are subject to copy editing. Authors will receive galley proof prior to publication. Galley proof is only for correction of errors, and text changes

may not be made. The galley proof should be returned by the author within 48 hours from receipt, and no further changes may be made.

Illustrations consist of all material which cannot be set into type such as photographs, line drawings, graphs, charts, and tracings. Illustrations should be submitted separately from text copy. Figures and drawings should be professionally prepared with black ink on white paper. Photographs should be of high resolution, unmounted, untrimmed, glossy prints. Each must be clearly identified. No charges are made to authors for up to four illustration engravings. More are not permitted unless voted on by two editors and extra costs must be absorbed by the author.

Illustrations must be numbered and cited in the text. Legends, not exceeding 40 words and preferably shorter, must accompany each illustration, typed double spaced on separate sheets. The following information should appear on a gummed label affixed to the back of each illustration: Figure number, manuscript title, author's name, and arrow indicating top of the illustration.

In photographs in which there is any possibility of personal identification, an acceptable legal release must accompany the material.

A thesis summary of 75 to 100 words must accompany each manuscript.

Reprints may be obtained at cost plus shipping charges from the association and **should be ordered prior to publication.** The JOURNAL reserves the right to decline any manuscript. Authors should avoid placing subheads in the text, and the Editors reserve the prerogative of writing and inserting subheads according to JOURNAL style. — *The Editors.*

In addition, in view of *The Copyright Revision Act of 1976*, effective Jan. 1, 1978, transmittal letters to the editor should contain the following language: "In consideration of the Mississippi State Medical Association's taking action in reviewing and editing my submission, the author(s) undersigned hereby transfers, assigns, or otherwise conveys all copyright ownership to the MSMA in the event that such work is published by the MSMA." We regret that transmittal letters not containing the foregoing language signed by *all* authors of the submission will necessitate delay in review of the manuscript. — *The Editors.*

A Little Behind In Managing Your Finances?



AMA Advisers MONEY MASTER Account...

Even if you're pretty much on top of your personal or business money management duties, there's an easier way to handle it all that can save hours of your precious free time. It's the **AMA Advisers Money Master Account**, a state-of-the-art financial management system for managing your assets, investments, savings, expenses – even your insurance! With **Money Master**, you'll discover how easy personal finance can be.

AMA Advisers Money Master Account simplifies financial management with:

- **Your Own Budget Analysis...** through the use of coded checks you'll see your monthly expenses sorted and totaled into one of 37 pre-set categories such as insurance premiums, charitable contributions, education, utilities, vacation and many more. Great for personal or professional budgeting!
- **Discount Brokerage Services...** that enable you to trade stocks, bonds, government securities, options and of course, mutual funds.
- **One Monthly Statement for ALL Your Investments.** In addition to investments made through your **AMA Advisers Money Master Account**, simply supply us with the appropriate information and for your convenience, we'll track your investments, even those made through other brokers or mutual fund organizations. All that you tell us about will be shown on your **Money Master Account** statement.

Building Mutual Trust



AMA ADVISERS, INC.

AMA Advisers, Inc. is a subsidiary of the American Medical Association and manages the mutual funds in The AMA Group.

Services and products as described herein are not offered for sale in any state where they are not lawfully registered.

• **Special Year-End Statement Practically Completes Your Tax Return For You!** At year end, you'll receive a statement so complete that it even shows the proper tax schedule to use for filing your return! All you do is transfer the information to the form.

• **High Money Market Returns On Your Checking Account!** You earn money market rates on all the money in your account until the day your check clears, since an AMA Money Fund Account is opened through the **Money Master Account**.

If you would like convenience of a **Money Master Account**,

CALL TOLL FREE: 1-800-AMA-FUND
Ext. 2338 TODAY! (262-3863)

Or, complete and mail the coupon. You'll receive a complete **Money Master Account** Information Kit with an application to open the one account for all your investment needs. An AMA Money Fund prospectus will be included for complete details on fees and expenses relating to the fund. Please read the prospectus carefully before you invest or send money.

MS 2338

MAIL TO: AMA ADVISERS, INC.,
P.O. BOX 1923, WEST CHESTER, PA 19380-1923

☐ **Yes! Send me a FREE AMA Advisers Money Master Account Information Kit.**

NAME

ADDRESS

CITY

STATE ZIP CODE

PHONE # () Day ☐ Evening ☐
Area Code



“When I realized my chances of becoming disabled by age 65 were *three times greater* than the chances of death . . .

I compared disability insurance plans. And I decided that my MSMA-endorsed disability insurance plan

SERVES ME BEST!

It’s not group insurance, but an individually-owned policy which is *non-cancellable* and *guaranteed renewable*.”

If you’re a member of the Mississippi State Medical Association you may be eligible for this outstanding professional disability plan at *discounted premiums*.

- Non-cancellable, guaranteed renewable
- Medical specialty protection
- Presumptive loss provision
- Indexing of prior earnings
- Waiver of premium
- Cost of living rider
- Future disability insurance option
- Lifetime accident and sickness rider
- Total and residual disability protection

Offered by Paul Revere Insurance Company to MSMA members through its exclusive representatives, Professional Disability Specialists.

Jon B. Wimbish, Disability Specialist

1501 Lakeland Drive, Suite 200 Jackson, MS 39216 Telephone 362-9800

ORIGINAL PAPERS

Right Ventricular Myocardial Infarction

BRUCE ATKINSON, M.D.

Jackson, Mississippi

MYOCARDIAL INFARCTION involving the right ventricle was initially felt to have little clinical significance and to require no specific treatment for the right ventricular component. These impressions began to change after several investigations which were reported in the early 1970's. In 1974 Guiha and co-workers used electrocautery to produce extensive necrosis of the right ventricular lateral wall in dogs.¹ They found that these animals developed a slight increase in right ventricular filling pressure and a 20 percent reduction in cardiac output. If the animals received volume loading, they showed improvement in cardiac output and a more marked increase of right heart pressures in comparison to left heart pressures. In the same year, Cohn et al reported a series of 78 patients with acute myocardial infarction and cardiogenic shock.² Six of these 78 patients had elevation of right heart pressures disproportionate to left heart pressures, consistent with right ventricular infarction. Four of the six survived; the two who died had extensive right ventricular necrosis at postmortem examination.

Right ventricular infarction occurs as a complication of inferior or posterior left ventricular infarction; it is almost never seen in patients who have infarction only of the anterior or anterolateral left ventricle.³ The incidence of right ventricular infarction in acute inferior myocardial infarction varies according to the type of series reported. Using

Right ventricular infarction is a common and often unrecognized complication of inferior myocardial infarction. It is frequently associated with hypotension, bradyarrhythmias, and other complications. The diagnosis of right ventricular infarction may be suggested by bedside examination and confirmed by noninvasive testing and by hemodynamic monitoring, which should be initiated in all patients with inferior myocardial infarction and hypotension. Management involves intravenous volume loading; inotropic support; and temporary atrial and ventricular pacing if necessary.

clinical and hemodynamic criteria, incidences of less than 10 percent have been reported.² Several large autopsy series examining patients dying of acute myocardial infarction indicated an incidence of greater than 30 percent. Isner and Roberts reported 236 autopsied patients with transmural left ventricular infarction.³ Right ventricular infarction was seen in none of the 97 patients with anterior left ventricular infarction and none of the 64 patients with inferior infarction which did not involve the interventricular septum. In contrast, over 50 percent (33 of 65) of the patients with inferior left ventricular infarction involving the inferior interventricular septum had infarction of the right ventricle.

These reports would suggest that patients whose

From the VA Medical Center, Jackson, MS.

inferior myocardial infarction is complicated by right ventricular infarction are at increased risk of death. If these patients can receive hemodynamic support for several days after their infarction, their chances of clinical recovery and hemodynamic improvement are very good. Shah and associates found that such patients showed an average increase in right ventricular function from a 30 percent ejection fraction to 40 percent when re-examined just ten days after initiation of treatment.⁴

With regard to the coronary arterial anatomic findings in right ventricular infarction, it would be expected that the artery supplying the inferior left ventricular wall (the right coronary artery in 90 percent of patients and the circumflex in 10 percent) would have a total occlusion or a critical lesion. This has almost always been found to be true. In addition most, but not all, autopsied patients had significant lesions in the left anterior descending coronary artery.³

One might wonder why many patients with proximal occlusion of the right coronary artery do not experience right ventricular infarction. Several explanations have been advanced. Direct nourishment of the thin-walled right ventricle by thebesian veins may have a protective effect. The low pressures in the right heart produce less demand for oxygen and allow more blood flow to the myocardium in systole. It was formerly thought that pulmonary hypertension and associated right ventricular hypertrophy might predispose to right ventricular infarction, but this hypothesis has not been clinically confirmed. It appears that the mass of the right ventricle is a much less important determinant of right ventricular infarction than the collateral circulation from the left ventricle.

In persons with a dominant right coronary artery, the posterior descending branch supplies the posterior right ventricular wall, while the lateral wall is supplied by acute marginal branches. However, a branch of the left anterior descending artery, usually from the first septal perforator artery, passes through the moderator band of the right ventricle and is a major blood supply to the anterior right ventricular papillary muscle and the anterolateral wall of the right ventricle. Many patients with right ventricular infarction have also been found to have significant lesions of the left anterior descending artery proximal to the first septal perforator, and it is likely that impairment of collateral flow contributed to their right ventricular infarction.⁵

The physical findings suggestive of right ventricular infarction in patients with inferior left ventricular infarction have been reported to include el-

evated jugular venous pressure, especially with clear lungs; tricuspid regurgitation; right sided gallop rhythms; pulsus paradoxus; and Kussmaul's sign (rise in the jugular venous pressure with quiet inspiration). Dell'Italia and colleagues evaluated the sensitivity and specificity of these findings in patients with acute inferior myocardial infarction.⁶ They concluded that hemodynamically significant right ventricular infarction is very unlikely in the absence of both an elevated jugular venous pressure and Kussmaul's sign. Other physical findings were of secondary diagnostic importance because of their lesser sensitivity and specificity.

All these physical findings may occur in other diseases, including constrictive pericarditis, severe chronic biventricular failure, pulmonary embolus, cor pulmonale, and cardiac tamponade; such diseases must be excluded by other diagnostic testing.

Since Cohn et al in 1954 first described the disproportionate elevation of right atrial pressure and right ventricular filling pressure in right ventricular myocardial infarction, their results have been repeatedly confirmed. Characteristic findings include a right atrial mean pressure of 10 mm Hg or higher and a right atrial to pulmonary wedge pressure ratio of 0.8 or greater.⁷ These two values correlated closely with right ventricular necrosis observed at autopsy. Sometimes these hemodynamic findings were much more obvious after volume loading.¹ The similarity of this hemodynamic picture to both constrictive pericarditis and restrictive cardiomyopathy has been noted, and may be explained by the fact that patients with right ventricular infarction exhibit not only poor right ventricular compliance, but also significant right ventricular dilatation, producing pericardial restraint because the pericardium is limited in its ability to dilate acutely.

The electrocardiographic changes in right ventricular infarction have been very extensively reported and reviewed.⁸ They may be summarized as follows:

First, a diagnosis of right ventricular infarction should be made only if there is EKG evidence of inferior or inferoposterior left ventricular infarction.

Second, if in the clinical setting of acute inferior myocardial infarction, there is ST segment elevation of 1 mm or more in lead V1, right ventricular infarction should be strongly suspected. This finding has even stronger predictive value if there is a discordant relationship between leads V1 and V2, with ST depression in lead V2.

Third, ST segment of 1 mm or more in any of the right precordial leads (V3R to V6R) in the clinical setting of acute inferior infarction is indicative

TABLE 1
COMPLICATIONS OF RIGHT VENTRICULAR INFARCTION

1. Hypotension
2. Atrioventricular block
3. Refractory hypoxemia due to shunting through foramen ovale
4. Tricuspid regurgitation
5. RV thrombus formation
6. RV rupture

of right ventricular infarction. The ST segment elevation in lead V4R is almost always greater than that in lead V1. This may be a transient finding, and disappears in half the patients ten hours after the onset of symptoms. Q waves may develop in the right precordial leads; however, their presence or absence may be affected by even slight changes in lead placement. Q waves should therefore not be the primary diagnostic criterion for right ventricular infarction.

Fourth, right ventricular infarction may rarely be associated with significant ST segment elevation in several of the usual left precordial leads and may thereby mimic anterior left ventricular infarction. Unlike true anterior infarction, the magnitude of the ST segment elevation is maximal in lead V1 and decreases from right to left. Furthermore, abnormal Q waves do not evolve in the left precordial leads after right ventricular infarction.

Changes on M-mode echocardiography in right ventricular infarction include right ventricular dilatation and hypokinesis or akinesis of the anterior right ventricular wall. The two dimensional echocardiogram is the superior study for detecting both these findings. In addition, echocardiography may help differentiate right ventricular infarction from pericardial disease, which can produce similar hemodynamic findings.

Myocardial scanning with technetium 99-m pyrophosphate has been shown to be highly specific for myocardial infarction, but lacks sensitivity in patients with documented right ventricular infarction by hemodynamic and autopsy studies. In contrast, radionuclide ventriculography has been very helpful in demonstrating enlargement of the right ventricle, regional wall motion abnormalities, and determination of right and left ventricular ejection fractions.⁴ As mentioned earlier, it is common to see a significant improvement in right ventricular ejection fraction when radionuclide ventriculography is repeated one week to ten days after infarction.

Hypotension is the most common complication of right ventricular infarction (see Table 1). The

management of patients with right ventricular infarction and hypotension involves placement of a Swan-Ganz catheter for monitoring of right atrial and pulmonary wedge pressures. Fluids are administered rapidly until the pulmonary wedge pressure has increased to 15-20 mm Hg. Frequently, this alone is not sufficient to improve left ventricular function or blood pressure. Possible reasons for this include: (1) increasing right ventricular volume compresses the left ventricle even more within a fixed pericardial space, thereby limiting any increase in left ventricular preload; (2) increasing right ventricular volume increases oxygen demand and produces further ischemic right ventricular dysfunction; and (3) the right ventricular infarction shifts the ventricular function curve, flattening it so that further increases in right ventricular filling pressures do not increase right ventricular output.⁴

Several series now have reported significant benefit when inotropic support has been used in addition to volume loading. The addition of dobutamine produces marked improvement in cardiac index, stroke volume index, right ventricular end systolic volume, and right ventricular ejection fraction. The evidence is strong enough that we can now recommend dobutamine for patients with right ventricular infarction and hypotension who fail to respond to volume loading. Vasodilators such as nitroprusside or nitroglycerin have been used also, but patients who are already hypotensive should only be considered for cautious use of vasodilators as "third line" treatment after volume loading and inotropic support.

Refractory hypoxemia may result when right atrial pressures become markedly elevated and produce right-to-left shunting through a foramen ovale. Severe hypoxemia rarely may require closure of the shunt, either surgically or by the use of a Swan-Ganz catheter to occlude the foramen ovale until right ventricular function improves. Tricuspid regurgitation may be due to either right ventricular dilatation or to infarction of the right ventricular papillary muscle. It usually produces no serious or lasting consequences. Right ventricular thrombus formation may be a source for pulmonary embolism. Right ventricular rupture is very rare; it produces cardiac tamponade and is rapidly fatal.

The incidence of AV nodal conduction abnormalities is much higher when an inferior myocardial infarction is complicated by right ventricular infarction. Braat and colleagues in 1983 reported 67 consecutive patients with acute inferior infarction, 29 of whom had evidence of right ventricular infarction by noninvasive studies.⁹ Second or third degree AV block developed in 5 of 38 patients (13

percent) without right ventricular infarction and in 14 of 29 patients (48 percent) with right ventricular infarction. Furthermore, patients with right ventricular infarction who require temporary transvenous pacing are more susceptible to ventricular fibrillation during pacing. This is due to re-entrant circuits involving the pacemaker-stimulated site and the infarcted region.

Many patients with right ventricular infarction and advanced AV block do not improve hemodynamically even when their bradyarrhythmias are treated with ventricular pacing. An obvious reason for this is that atrial systole is required to fill the poorly compliant right ventricle. Atrial or AV sequential pacing may be necessary in these patients. Love and colleagues evaluated seven patients with right ventricular infarction and advanced AV block.¹⁰ After AV synchrony was restored, these patients showed an average improvement from 88 mm to 133 mm in systolic blood pressure, and from 3.8 L/min. to 5.7 L/min. to cardiac output. Even with the technical difficulty of placing atrial and ventricular temporary pacing leads, sequential pacing may be preferable over ventricular pacing in these patients.

In conclusion, right ventricular infarction is a common complication of inferior myocardial infarction and is frequently unrecognized. The diagnosis of right ventricular infarction may be suggested by bedside examination of the jugular venous pulse and may be confirmed by several noninvasive diagnostic methods and by hemodynamic monitoring, which should be initiated in all patients with inferior myocardial infarction and hypotension. Management involves both volume loading and the use of inotropic agents to improve cardiac output and blood pressure. If temporary pacing becomes

necessary, such patients may benefit more from AV sequential pacing than from ventricular pacing alone. ★★★

1500 East Woodrow Wilson (39216)

Acknowledgement

The author wishes to express appreciation to Mrs. Cenella Grant for her assistance in preparation of this manuscript.

References

1. Guiha NH, Limas CJ, Cohn JN: Predominant right ventricular dysfunction after right ventricular destruction in the dog. *Am J Cardiol* 33:254-257, 1974.
2. Cohn JN, Guiha NH, Broder MI, Limas CJ: Right ventricular infarction. Clinical and hemodynamic features. *Am J Cardiol* 33:209-214, 1974.
3. Isner JM, Robert WC: Right ventricular infarction complicating left ventricular infarction secondary to coronary heart disease. *Am J Cardiol* 42:885-894, 1978.
4. Shah PK, Maddahi J, Berman DS, et al.: Scintigraphically detected predominant right ventricular dysfunction in acute myocardial infarction: Clinical and hemodynamic correlates and implications for therapy and prognosis. *J Am Coll Cardiol* 6:1264-1272, 1985.
5. Haupt HM, Hutchings GM, Moore GW: Right ventricular infarction: Role of the moderator band artery in determining infarct size. *Circulation* 67:1268-1272, 1983.
6. Dell'Italia LJ, Starling MR, O'Rourke RA: Physical Examination for exclusion of hemodynamically important right ventricular infarction. *Ann Int Med* 99:608-611, 1983.
7. Coma-Canella I, Lopez-Sendon J, Gamallo C: Low output syndrome in right ventricular infarction. *Am Heart J* 98:613-620, 1979.
8. Reddy GV, Schamroth L: The electrocardiology of right ventricular myocardial infarction. *Chest* 90:756-760, 1986.
9. Braat SH, de Zwaan C, Brugada P, et al.: Right ventricular involvement with acute inferior wall myocardial infarction identifies high risk of developing atrioventricular nodal conduction disturbances. *Am Heart J* 107:1183-1186, 1984.
10. Love JC, Haffajee CI, Gore JM, Alpert JS: Reversibility of hypotension and shock by atrial or atrioventricular sequential pacing in patients with right ventricular infarction. *Am Heart J* 108:5-13, 1984.

Effective Palliation of Metastatic Adenocarcinoma to the Liver: A Case Report

R. ARNOLD SMITH, M.D.

G. CRAWLEY STUBBLEFIELD, M.D.

MORRIS T. REAGAN, M.D.

Jackson, Mississippi

ADENOCARCINOMA OF MOST origins will metastasize to the liver, although extra-abdominal primary sites less often demonstrate the multiple metastases typical of gastrointestinal primary tumors seeding via the portal vein. The history of colorectal cancer is predictable because it progressively extends through the bowel wall, involves regional lymph nodes, and eventually manifests evidence of liver and lung dissemination. As many as 70% of colorectal cancer patients will ultimately develop spread to the liver.¹ Liver metastases are extremely common with gastric or distal esophageal adenocarcinomas as well.² Colon adenocarcinomas metastatic to liver are poorly responsive to chemotherapeutic agents.³ Toxicity from chemotherapy may accelerate the anorexia, jaundice, and general speed of decline. Similarly, radiation alone is often intensely nauseagenic, and a reasonably consistent benefit is lacking. Patients with hepatic metastases and without other organ failure eventually progress to hepatic insufficiency, coma, and death.

In a report published in December 1986, Rotman et al⁴ described 23 patients with colorectal hepatic metastases treated by infusion 5-fluorouracil (5-FU) and whole liver irradiation, and improved survival and palliation was thought to have been achieved in selected patients. In this report he reviews published evidence that patients with extensive liver metastases may have a survival of six to twenty weeks.

Our recent experience in treating the upper ab-

Nausea or gastritis has long frustrated effective palliation of metastatic adenocarcinoma to the liver or to the adjacent nodes in the porta hepatics or periaortic regions. According to the authors, the morbidity of treatment has seemed to justify a therapeutic nihilism while patients are allowed to lapse into hepatic failure. They describe in detail the first of eight patients treated using a novel combination approach. Seven of the eight patients reported subjective improvement in malaise and most showed objective evidence of improvement by falling CEA's or improving liver function studies. Some descriptive data is included on other of the eight cases.

dominal area includes two patients with liver and upper abdominal periaortic disease, one patient with a large 7 cm mass encasing the retroperitoneal duodenum, one patient with distal esophageal adenocarcinoma with liver metastases, and one patient with a bulky painful adenocarcinoma of the pancreas without evidence of liver spread. The only unsuccessfully treated patient had extensive local adenocarcinomas of the pancreas with advanced liver metastases and jaundice. The technique we have used is a modification of the Rotman regimen consisting of simultaneous constant 96-hour infusion 5-fluorouracil (5-FU) as a radiation sensitizer along with brief but repeated five treatment cycles of radiotherapy. Using this technique, infusion 5-FU, a documented radiosensitizer for cloacogenic squamous cell carcinoma⁵ and squamous cell car-

From the Department of Radiation Therapy (Drs. Smith and Reagan) and the Department of Medical Oncology and Hematology (Dr. Stubblefield), Mississippi Baptist Medical Center, Jackson, MS.

cinoma of the esophagus⁶ may be extended to palliative problems involving adenocarcinoma of the upper abdomen. The first patient's history is as follows:

F. M. is a 68-year-old white male who underwent segmental resection of the ascending colon in March 1983 for an adenocarcinoma which had metastasized to five lymph nodes. He did well until the latter part of 1985 when he developed progressive enlargement of a mass in the umbilicus. In February of 1986 he was first seen for palliative radiation therapy with a 4 cm ulcerating mass in the umbilicus. A CT scan through the liver (see Figure 1) was obtained which showed multiple large liver metastases. The umbilical mass was treated with 3000 cGy in ten fractions using twenty MEV electrons. The patient was evaluated for chemotherapy at this time but active systemic therapy was not recommended. The patient experienced good regression when he was seen in follow-up on 6-24-86, but he was complaining of some vague abdominal pains and a repeat liver CT scan showed progression. It was elected to place the patient on oral 5-FU 500 mg twice a week, cyclophosphamide 25 mg twice a day and medroxyprogesterone acetate 10 mg twice a day and to initiate regular CEA determinations to monitor progress. Over the following months the serum CEA (see Figure 2) steadily fell reaching a nadir on 10-30-86. At that time the CEA began a sharp rise. By 12-29-86 a repeat CEA confirmed a very steep upward slope on the serologic marker. The patient was experiencing anorexia, malaise, and increasing abdominal discomfort. A repeat CT scan of the liver showed moderate enlargement of the metastases and the interval development of a large hilar mass confirming a progression of the patient's



Figure 1. Initial liver CT scan in February of 1986 showing multiple large liver metastases (arrows).

tumor. It was at this time that we began the modified Rotman regimen of infusion 5-FU and hepatic radiotherapy.

After the Rotman regimen was complete the patient was placed back on 5-FU by mouth in orange juice 500 mg every other day, cyclophosphamide 25 mg bid, medroxyprogesterone acetate 10 mg bid, and vitamin-C as time released tablets (Bronson Pharmaceuticals, LaCanada, California) six grams daily. The patient experienced a very significant subjective improvement with increasing appetite and loss of upper abdominal pain. The accompanying graph and chart (see Figure 2) of serum CEA shows the depression which occurred in this patient's elevated CEA after hepatic irradiation was begun, reaching a nadir on 5-23-87 at 54.0. A second steep rise in CEA was terminated on 8-19-87 by a repeat course of infusion 5-FU alone. This mild response was short lived, however, and another marked response was obtained starting 10-01-87 when infusion 5-FU was combined with an additional 180 cGy \times 4 = 720 cGy to the entire liver. The only significant difference between the treatment at part C and part D, Figure 2, was the radiotherapy added at part D.

Discussion

The Rotman regimen consists of 100 mg/m² per day of 5-FU given as a four day constant infusion combined with 200 cGy midplane to the liver daily for five days or a total of 1000 cGy. This cycle is repeated every other week for three cycles giving a total of 3000 cGy to the liver. The CEA serologic marker⁷ is a useful source of objective data for monitoring the success of oncologic management in this situation. The administration of radiation to the liver at 200 cGy per day without pharmacologic prophylaxis could be expected to cause severe nausea. For that reason we treat this potential side effect very aggressively with a regimen similar to that in standard use with cisplatin including metoclopramide 10 mg qid thirty minutes before meals, Compazine SpansulesTM one bid, and dexamethasone 4 mg qid. The dexamethasone not only has a direct anti-nausea effect, but it is also very useful in preventing the exacerbation of edema which typically accompanies tumor necrosis and which may contribute significantly to an acute exacerbation of hepatic dysfunction in patients already severely compromised by multiple sites of intrahepatic tumor.

As mentioned above, in the last six months we have treated eight patients using the Rotman Technique. Figure 3 documents liver function studies in three of these patients. There have been no com-

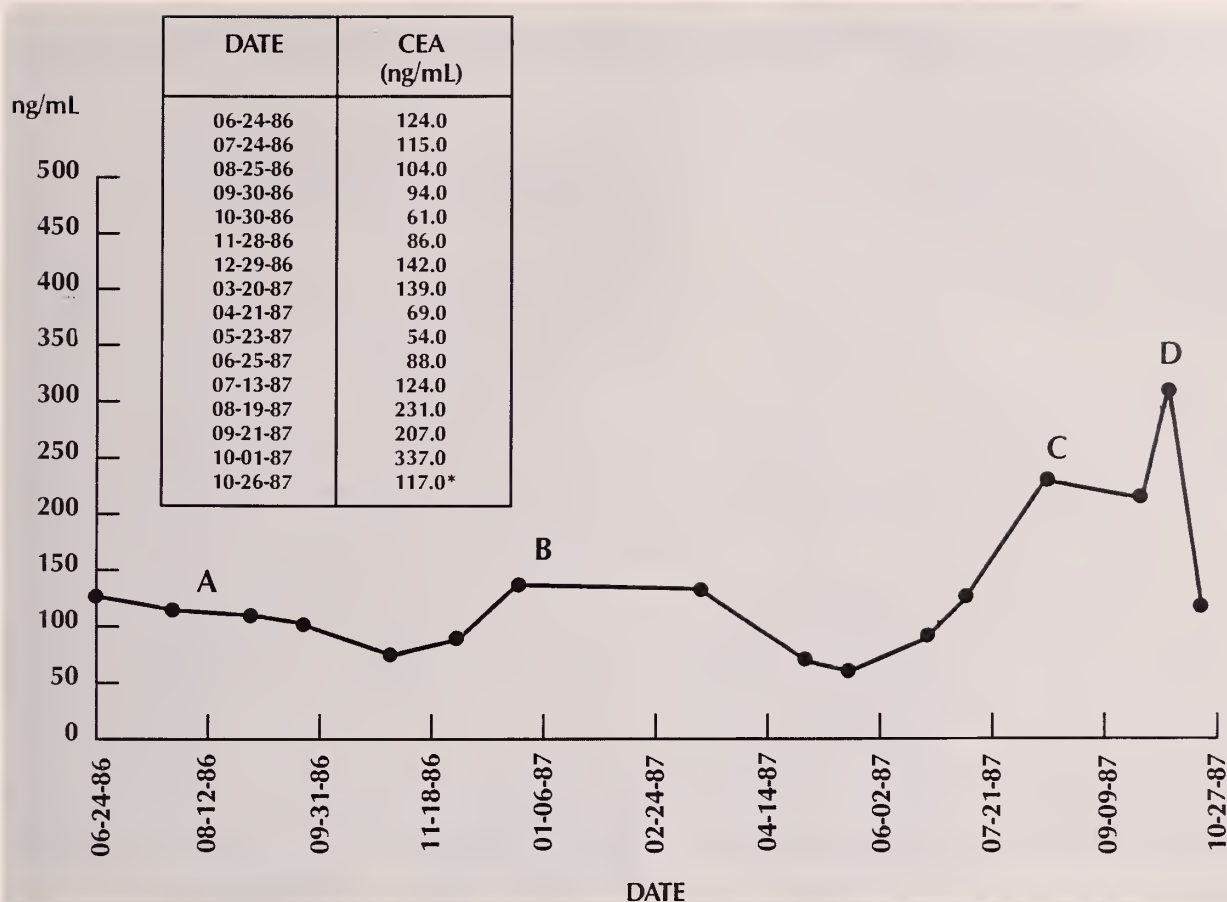


Figure 2. Graph and chart of CEA determinations showing downtrends established by intervention on four occasions (see text for more detail).

- A. Oral 5-FU and cytoxan
- B. Infusion 5-FU and whole liver radiotherapy (Rotman schedule)
- C. Infusion 5-FU alone
- D. Infusion 5-FU plus 180 cGy \times 4

plications from treatment and only one patient has worsened in the immediate time period after treatment. The patient with adenocarcinoma of the distal esophagus was a young male musician who came in stretcher-ridden, and was back active in the band and enjoying life a few weeks later. Another colon cancer patient with multiple liver metastases has had the bilirubin fall from 22 to 7 accompanying a rather dramatic improvement in energy level and strength. Still another jaundiced patient had her bilirubin fall from 10 to 4 with decrease in enzyme evidence of hepatic dysfunction and resolution of jaundice.

While our experience with this modality is still limited and premature optimism is clearly a risk, our current impression fully supports the favorable earlier report by Rotman, and indicates a probable

therapeutic advance in the palliation of upper abdominal adenocarcinomatosis. The concurrent use of the chemotherapy agent 5-FU has long been reported to increase the effectiveness of radiotherapy for upper abdominal adenocarcinoma, particularly the pancreas. However the serum half life of 5-FU is ten minutes.⁸ Since 5-FU is incorporated within the cell nucleic acids⁹ at an affective rate only at certain periods of the cell cycle, and since the adenocarcinomas may have a long cell cycle time measured in days, only a small proportion of the cancer cells¹⁰ would have the opportunity to incorporate sensitizing amounts of 5-FU as a consequence of bolus I.V. injections of the agent. The solution of constant around-the-clock infusions lasting for a time period adequate to expose almost all

Liver Irradiation 6-10-87 through 10-02-87					
	ALB	BILI	ALK PHOS	LDH	SGOT
M.W.					
8-18-87	3.2	1.2	507	852	70
9-09-87	2.6	10.8	616	1006	990
9-21-87	2.8	4.2	517	506	77
10-13-87	2.8	1.0	249	621	54
10-28-87	2.8	0.8	331	1021	50
Liver Irradiation 5-25-87 through 7-06-87					
	ALB	BILI	ALK PHOS	LDH	SGOT
T.D.					
1-19-87	2.5	0.4	78	101	31
5-23-87	3.2	0.9	616	285	67
7-27-87	3.5	0.2	389	180	27
Liver Irradiation 5-21-87 through 6-24-87					
	ALB	BILI	ALK PHOS	LDH	SGOT
H.B.					
1-15-87		0.8	488	263	111
3-27-87		16.4	555	360	234
4-20-87		16.0	453	380	110
5-27-87		15.2	434	290	148
6-12-87		22.6	943	166	192
7-20-87		8.8	1010	139	131
9-28-87		14.7	1125	274	190

Figure 3. Serial chemistry screens on three of the treated patients showing values in the time period around whole liver radiotherapy. Note major declines in bilirubin of two of these patients both of whom were clinically jaundiced.

dividing cancer cells to the active agent seems almost too elegantly simple to be valid. Resting intermitotic cells like hepatocytes incorporate the agent minimally. That we are discovering this application of 5-FU after the drug has been around twenty years gives testimony that some problems can be solved by understanding the mechanism and best use of existing agents rather than by the introduction of new drugs. ★★★

1225 North State Street (39202)

References

1. Berge T, Ekelund G, Mellner C., Phil B, Wenckert A: Carcinoma of the Colon and Rectum in a Defined Population: An Epidemiological, Clinical and Postmortem Investigation of Colorectal Carcinoma and Co-Existing Benign Polyps in Malmo, Sweden. Acta Chr Scand 438(Suppl):1-86, 1973.
2. Bengmark S, Hafstrom L: The Natural History of Primary and Secondary Malignant Tumors of the Liver. Cancer 23:198-202, 1969.
3. O'Connell M, Schutt A, Moertel C, Rubin J, Hahn R, Scott M: A Randomized Clinical Trial of Combination Chemotherapy in Advanced Colorectal Cancer. Am J Clin Oncol 10(4):320-324, Nov. 1987.
4. Rotman M, Kuruvilla A, Choi K, Bhutiani I, Aziz H, Rosenthal J, Braverman, A, Marti J, Brandy M: Response of Colo-Rectal Hepatic Metastases to Concomitant Radiotherapy and Intravenous Infusion 5-Fluorouracil. Int J Radiat Oncol Biol Phys 12:2179-2187, Dec. 1986.
5. Smith RA, Stubblefield GC, Brock DT, Reagan MT: Anorectal Squamous Cell Carcinoma at Mississippi Baptist Medical Center: Results of the Last Five years of the Nigro Schedule J Miss State Med Assoc 26:283-284, Oct. 1985.
6. Leichman L, Herskovic CG, Lattin PB, Steiger Z, Tapazoglou E, Rosenberg JC, Arbulu A, Asfaw I, Kinzie J: Nonoperative Therapy for Squamous-Cell Cancer of the Esophagus. J Clin Oncol 5:365-370, March 1987.
7. Sugarbaker P, Bloomer W, Corbett E, Chaffey J: Carcinoembryonic Antigen (CEA): Its Role as a Monitor of Radiation Therapy for Colorectal Cancer. Cancer 42 (Suppl)1434-1436, Sept. 1978.
8. Posner M, Belliveau J, Weitberg A, Wiemann M, Cummings F, Sabbath K, Murray C, Calabresi P: Clinical and Pharmacokinetic Study of Continuous Infusion Cisplatinum + Bolus 5-Fluorouracil in Colorectal Carcinoma (Abstr) ASCO. 6:37, March 1987.
9. Kinsella T, Dobson P, Mitchell J, Fornace A: Enhancement of X-ray induced DNA Damage by Pre-treatment with Halogenated Pyrimidine Analogs. Int J Radiat Oncol Biol Phys 13:733-739, May 1987.
10. Ota D, Johnston D, Drewinko B: Colorectal Carcinoma Cell Kinetics: Need for New Therapeutic Strategies (Abstr) ASCO. 6:13, March 1987.

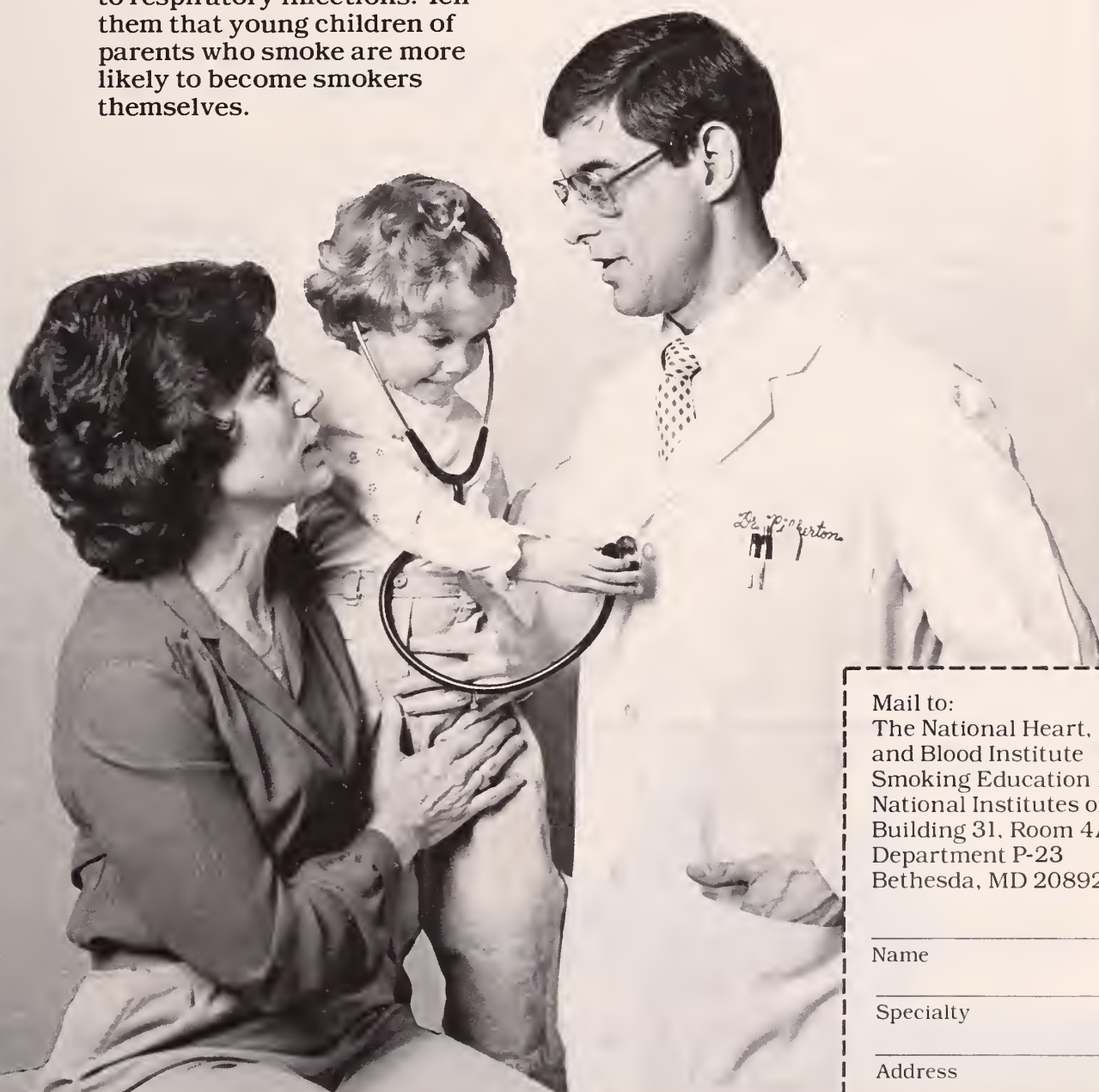
A Clinical Opportunity for Smoking Intervention

You can play a special role in reaching smokers. Encouraging parents not to smoke can improve the health of the entire family.

Take a few minutes to explain that children of parents who smoke are often more prone to respiratory infections. Tell them that young children of parents who smoke are more likely to become smokers themselves.

The minutes you spend can make a difference now, and in the years ahead.

For a free copy of *Clinical Opportunities for Smoking Intervention: A Guide for the Busy Physician*, complete the form below.



Mail to:
The National Heart, Lung, and Blood Institute
Smoking Education Program
National Institutes of Health
Building 31, Room 4A 18
Department P-23
Bethesda, MD 20892

Name

Specialty

Address

City

AIM HIGH

A PRESCRIPTION FOR PHYSICIANS

BOTHERED BY:

- ★ Too much paperwork?
- ★ The burden of office overhead?
- ★ Malpractice insurance costs?
- ★ Not enough time for the family?
- ★ No time to keep current with technology and new methods?
- ★ No time or money for professional development?

JOIN THE AIR FORCE MEDICAL TEAM; WE'LL PROVIDE THE FOLLOWING:

- ★ Competent and dedicated professional staff.
- ★ Time for patients and for keeping professionally current.
- ★ Financial security, a generous retirement for those who qualify.
- ★ If qualified, unlimited professional development.
- ★ Medical facilities all around the world.
- ★ 30 days of vacation with pay each year.
- ★ Complete medical and dental care.
- ★ Low cost life insurance.

Want to find out more? Contact your nearest Air Force recruiter for information at no obligation. Call

**SSgt Jauregui
(901)278-6349**

**Collect or
1-800-423-USAF Toll Free**



Antenatal Diagnosis for the Clinician

ALLAN T. BOMBARD, M.D.

Ocean Springs, Mississippi

ANTENATAL DIAGNOSIS of many genetic disorders is commonplace. It is now a matter of routine to use several different diagnostic techniques to apprise couples of their pregnancy related risks, and to inform them of new technologies available for the prenatal detection of many congenital abnormalities. The purpose of this review is to familiarize the reader with the characteristics of congenital disorders as well as the ways in which various conditions may be detected.

In order to understand which genetic disorders are amenable to diagnosis, and which justify the risks of testing, several facts must be determined. *First*, is the individual in question more likely to have the disorder than the general population; ie, is there increased likelihood of disease? *Second*, what are the risks of testing? *Third*, is the detection of the disorder technically feasible. These issues will be addressed in discussing the areas commonly thought to be responsible for most genetic disorders.

Chromosomal Abnormalities

The normal human chromosomal complement consists of 22 pairs of homologous chromosomes (autosomes) and a pair of sex chromosomes. The normal male complement is 46,XY and the normal female is 46,XX. There exist many documented syndromes caused by an imbalance in the number or structure of the normal complement of chromosomes. For the most part these conditions are caused by errors during meiosis or mitosis. The most common autosomal abnormalities include trisomy 21 (Down syndrome), trisomy 18 (Edwards syndrome), trisomy 13 (Patau syndrome) and the sex chromosome abnormalities 45,X, 47,XXX, 47,XYY and 47,XXY (Klinefelter syndrome). The abnor-

malities involve deviations from the normal expected diploid number; thus, they are termed aneuploid. Structural abnormalities, such as translocations, deletions, insertions, inversions, rings, dicentric and isochromosomes are several examples of non-aneuploid abnormalities. Structural rearrangements may or may not cause disease, depending upon whether they are balanced or unbalanced, ie, with a net loss or addition of functional genetic material.

The most common indication for prenatal diagnosis is advanced maternal age, owing to increasing risk for chromosomally abnormal offspring. Most geneticists recommend consideration of genetic counseling and prenatal diagnosis for all women who will be 35 years of age or older at the time of delivery, although that specific age is somewhat arbitrary. At institutions having adequate capacity for testing, diagnosis may be offered to women of any age who clearly understand the risks, limitations and benefits of testing. Maternal-age specific risks are listed in Table 1.

Of all chromosome abnormalities detected, the single most common reported in most centers is trisomy 21 (Down syndrome), which constitutes about half of all abnormal diagnoses. The recurrence risk following the birth of a child with trisomy 21 is about 1%. However, not all cases of Down syndrome are caused by trisomy.

About 3-4% of individuals with trisomy 21 (Down syndrome) possess this chromosome abnormality as a result of an unbalanced translocation. Twenty-five percent of such patients have a parent with balanced chromosomal rearrangement which predisposes to trisomy 21. Offspring of such carriers have an increased risk to be chromosomally abnormal: 10% if the mother is the carrier and 2-3% if the father is the heterozygote. The same relative increase in risk may apply for parents who are heterozygous for other balanced rearrangements.

Once a couple has had a child with a chromosomal abnormality, there is an increased risk for similar abnormalities in subsequent pregnancies.

From the Department of Obstetrics and Gynecology, Keesler AFB Medical Center, Biloxi, MS.

The opinions expressed herein are those of the author and do not necessarily reflect those of the United States Air Force or the Department of Defense.

ANTENATAL DIAGNOSIS/Bombard

Prenatal diagnosis should be offered to these couples even if the parents are chromosomally normal.

Mendelian (Single Gene) Abnormalities

A couple known to be at risk for having a child with a disease inherited in a Mendelian fashion may wish to consider prenatal diagnosis, if available for the disorder in question. The risk of transmission may be as great as 25% in patients who have autosomal recessive disorders (eg, cystic fibrosis) and 50% for those with autosomal dominant conditions (eg., Marfan syndrome). Many of these disorders are sufficiently harmful to warrant prenatal diagnosis, thus justifying the potential risks of testing. Most of the single gene disorders are not amenable to prenatal diagnosis, although biochemical screening along with amniocentesis and/or ultrasound examination is appropriate for several.

There exist about 4000 Mendelian disorders, the majority of which are transmitted in an autosomal dominant or autosomal recessive fashion. However, about 125 are inherited as X-linked recessive conditions. In these cases, prenatal diagnosis for determination of fetal sex may be appropriate if specific tests are not available.

The majority of detectable single gene disorders are autosomal recessive, although the detection of autosomal dominant disorders is increasing. For the most part, biochemical testing is done by relatively few specialized laboratories — which maintain expertise by volume and specialization. As the number of detectable disorders increases, it will become more difficult for the practicing clinician to stay current with both disorders amenable to testing and appropriate, reputable reference laboratories. Thus, a good working relationship with geneticists is essential.

Most autosomal recessive conditions are the result of enzyme deficiencies which cause metabolic derangements. Most of these inborn errors of metabolism cause mental retardation and thus warrant consideration of prenatal diagnosis. Several, for example phenylketonuria, are amenable to treatment if detected early.

Approximately 130 metabolic disorders may be detected antenatally. Most rely upon specific enzyme assays, although substrate or product assays are also used. Direct testing of amniocytes, cytotrophoblast (CVS) and fetal lymphocytes is often utilized, in addition to indirect assays — such as linkage analysis. In general, normal values must be established. The successful detection of inborn er-

rors of metabolism requires greater number of cells (and therefore more time in culture) and more technical expertise than for routine cytogenetic analysis.

In many instances, couples are recognized to be at risk on the basis of previously affected offspring. Several groups, however, merit screening and counseling owing to a particularly increased risk for the following detectable conditions.

<i>Blacks:</i>	<i>Sickle cell anemia</i>
<i>Ashkenazi Jews:</i>	<i>Tay-Sachs disease</i>
<i>Orientals:</i>	<i>Alpha-thalassemia</i>
<i>Mediterraneans:</i>	<i>Beta-thalassemia</i>

Polygenic/Multifactorial Disorders

Many inherited disorders appear to affect only single organ systems. The facts that (1) many of these conditions may appear with increased frequency in a given family, (2) inheritance patterns are not completely consistent with Mendelian patterns and (3) empiric recurrence risks are 2-10%, suggest an alternative mode of inheritance which embodies both familial and environmental etiologies. These conditions are thus referred to as polygenic/multifactorial disorders. Several common disorders are inherited in this manner, many of which may be detected by sophisticated ultrasound examination: neural tube defects, congenital heart disease, oral clefts and by indirect evidence, pyloric stenosis.

The isolated neural tube defects (NTD) represent a particularly common group of detectable polygenic/multifactorial disorders. Spina bifida and anencephaly are the most notable examples of NTD. The incidence of NTD in the general United States population is about 1/500-1/1000 births. However, couples who have had a child with NTD, or in which one of the parents has a NTD, are a greater risk — 2-3%, respectively — for any type of NTD in subsequent pregnancies.

The neural tube defects are detectable by amniocentesis, on the basis of elevated levels of amniotic fluid alpha-fetoprotein (AF-AFP) or the presence of acetylcholinesterase. Unfortunately, neither sensitivity nor specificity are 100%, owing to closed lesions or other causes for abnormal AF-AFP. Nonetheless, centers should routinely assay for AF-AFP when genetic amniocentesis is done for other indications, such as advanced maternal age. Of course, large neural tube defects should also be detectable using sophisticated ultrasound examination.

While testing for AF-AFP may be diagnostic of NTD, this approach is useful only for couples who

present with an increased risk, the instance in only 5-10% of children born with NTD. A promising screening test for couples who are by history, at no increased risk is maternal serum alpha-fetoprotein (MSAFP) which will be addressed later.

Inasmuch as the genetics of the polygenic/multifactorial disorders are often not clear, it should not be surprising that direct prenatal diagnosis of the polygenic/multifactorial disorders is often unavailable. In the main, detection is not possible without direct visualization of the affected organ system.

Teratogenic Disorders

For most disorders attributable to solely exogenous, environmental causes, antenatal diagnosis is of little use. Maternal exposures to medications, illicit drugs and alcohol, infectious agents or irradiation are common concerns. The specificity of the agent, dosage, duration and time of exposure in pregnancy, and both maternal and fetal susceptibilities all must be taken into consideration when discussing potential teratogens.

Unfortunately, the detection of teratogenic effects by ultrasound scan (such as congenital heart defects after rubella infection) or by amniocentesis (such as NTD, on the basis of increase amniotic fluid alpha-fetoprotein, after valproic acid exposure) is uncommon. In other words, normal results after ultrasound scan or amniocentesis can never assure a normal outcome.

Detection of Congenital Abnormalities

Most techniques employed for prenatal diagnosis require analysis of cells present in amniotic fluid liquor. These cells are derived from the amnion and fetus by desquamation, and are frequently obtained by genetic amniocentesis — a surgical procedure usually performed at about 16 weeks' gestation. Several weeks may be required to grow in culture sufficient numbers of cells for chromosomal studies, and often greater time for biochemical analysis.

Genetic amniocentesis is a standard diagnostic procedure which is recognized to be a safe, reliable and effective means to obtain fetal cells for analysis. Although no surgical procedure is risk free, maternal risks appear to be minimal (infection, < 0.1%; Rhesus isoimmunization). Fetal risks, however, are greater. Of particular concern is the risk for induced miscarriage, assumed to be < 0.5% above background loss rates. Parenthetically, it is often reported to be considerably less when performed by experienced clinicians using concurrent ultrasound guidance.

Genetic amniocentesis is appropriate for the pre-

TABLE 1
MATERNAL AGE-SPECIFIC RISKS AT TERM: (1) DOWN SYNDROME AND (2) ALL CHROMOSOMAL ABNORMALITIES*

Age	(1)	(2)	Age	(1)	(2)
20	1/1667	1/526	35	1/385	1/192
21	1/1667	1/526	36	1/294	1/156
22	1/1429	1/500	37	1/227	1/127
23	1/1429	1/500	38	1/175	1/102
24	1/1250	1/476	39	1/137	1/83
25	1/1250	1/476	40	1/106	1/66
26	1/1175	1/476	41	1/82	1/53
27	1/1111	1/456	42	1/64	1/42
28	1/1053	1/435	43	1/50	1/33
29	1/1000	1/417	44	1/38	1/26
30	1/952	1/385	45	1/30	1/21
31	1/909	1/385	46	1/23	1/16
32	1/769	1/323	47	1/18	1/13
33	1/625	1/286	48	1/14	1/10
34	1/500	1/238	49	1/11	1/8

*Modified from Hook, 1981; Hook, et al., 1983.

This table used for citing approximate risk of delivering an infant with (1) Down syndrome or (2) any chromosome abnormality at term, as a function of the maternal age. Column 2 includes trisomy 21 but excludes (*) 47,XXX for ages 20-32. Risk figures for diagnosis of the same abnormalities at the time of prenatal diagnosis with mid-second trimester genetic amniocentesis are approximately 140% greater than that which is listed above.

natal diagnosis of chromosome abnormalities, neural tube defects (on the basis of AF-AFP analysis), biochemical disorders and diseases detectable by analysis of DNA.

A welcome new addition to the clinician's diagnostic armamentarium has been the advent of a screening test, designed to identify couples who were unknowingly at risk for several different high-risk pregnancy conditions, most notable neural tube defects. That test is MSAFP (maternal serum alpha-fetoprotein) screening.

MSAFP screening is not diagnostic of any specific disorder; rather, it alerts the clinician to the possibility of a myriad of potential problems and signals the need for other, more definitive tests. Most mothers with abnormal with abnormal MSAFP values, high or low, will have normal pregnancy outcomes. Of those with high risk conditions, most will be found to have incorrect gestational dates, multiple pregnancies (both detectable by ultrasound scan alone) or a history of vaginal bleeding. Patients who have an abnormal MSAFP screening test should be offered counseling, an ultrasound examination, and if indicated, definitive testing such as by genetic amniocentesis.

Patients with abnormally elevated MSAFP values unexplained by ultrasound examination should be

ANTENATAL DIAGNOSIS/Bombard

offered amniocentesis for evaluation of AF-AFP. Those with abnormally low MSAFP values, again if unexplained by ultrasound examination, should be offered amniocentesis for fetal chromosome analysis.

A relatively recent development in prenatal diagnosis has been the use of "fetal-equivalent cells," the cytotrophoblast of the early placenta, for cytogenetic, biochemical and molecular analysis. These cells are obtained by sampling (biopsy of) the chorionic villi (CVS). While still a research procedure as defined by the Food and Drug Administration, CVS is commonly employed by several major university medical centers. Testing is usually performed between 9 and 11 weeks' gestation, and involves transcervical or transabdominal aspiration of villi using concurrent ultrasound guidance. Cytogenetic analysis may be accomplished by analyzing metaphases present in the villi, giving results in as few as 24 hours, or by standard culture techniques in 5-10 days.

Unfortunately, risks are less well defined for CVS as compared to amniocentesis, but are less than 1% above background (spontaneous) loss rates.

Antenatal diagnosis of hemoglobinopathies is possible directly by analysis of fetal blood, or by analysis of DNA representative of the fetus. Fetal blood may be obtained by placental aspiration (risking contamination with maternal blood) or by aspiration of fetal blood directly from the umbilical cord. The latter procedure may be done with direct visualization using fetoscopy, or with ultrasound guidance — PUBS (Percutaneous Umbilical Blood Sampling). The risks of fetoscopy, performed in only a few centers, is about 5% for fetal loss and is accomplished at about 19 weeks' gestation. PUBS is less likely to cause miscarriage, and may be performed earlier in pregnancy. Interestingly, PUBS is also being used for fetal transfusions, replacing intra-abdominal fetal transfusions for the treatment of RH isoimmunization.

Recently, techniques involving extraction of DNA from amniocytes or cytotrophoblast cells have been employed in prenatal diagnosis. These techniques, adapted from advances in the field of molecular biology to human prenatal diagnosis, involve digestion of DNA by bacterial enzymes (restriction endonucleases), separation of DNA fragments by electrophoresis and determination of specific DNA sequences using radio-labeled or immunologic probes. Although first applied to the diagnosis of fetal hemoglobinopathies, these techniques have

revolutionized analysis of DNA for other disorders such as cystic fibrosis, Duchenne muscular dystrophy and hemophilia.

If direct analysis cannot be performed, because a specific gene defect is unrecognized, indirect analysis may be accomplished. Since there are thousands of genes, yet only 46 chromosomes, many genes must share common chromosomes. By employing recognized DNA sequences which accompany as yet unrecognized deleterious genes on a given chromosome, indirect testing may be employed. This form of testing, using known markers to signal the presence or absence of unknown genes is termed linkage analysis.

Linkage analysis may be used in the detection of Duchenne muscular dystrophy, congenital adrenal hyperplasia, cystic fibrosis, adult polycystic kidney disease, Huntington's disease and hemophilia to cite a few instances. Unfortunately, recombination (crossing over), a normal event of meiosis, may lead to misdiagnosis if it occurs between the marker and the gene in question. For this reason, it is often necessary to employ several markers closely linked and flanking the gene in question, adding considerably to the cost of testing.

If a fetus has a disorder which manifests pronounced physical abnormalities, antenatal diagnosis is possible by visual means. Several of the skeletal dysplasias, such as achondroplasia or some forms of osteogenesis imperfecta, may be detected by roentgenography and skin disorders may be diagnosed using fetoscopy (with biopsy). More promising, however, is the use of sophisticated ultrasound examination.

Antenatal ultrasound has proven successful in identifying the fetus at risk for chromosome abnormalities, on the basis of anomalies or growth retardation, as well as for single gene disorders and single organ system disorders such as cardiac anomalies, hydrocephalus, renal dysgeneses and neural tube defects.

Summary

Genetic counseling and prenatal diagnosis is a rapidly expanding field and is playing an increasingly crucial role in routine obstetric care. Techniques such as MSAFP screening are now readily available to every obstetric patient to identify those which may be at increased risk to have a child with a congenital abnormality.

Although pregnancy termination is an option for some couples, many will use the information provided to prepare emotionally and financially for the birth of a child with special problems, assist with

obstetric management during the remainder of the pregnancy, and/or arrange for delivery in a referral medical center where high-risk specialty care is available.

It is imperative that practicing clinicians understand the fundamentals of inherited disease and keep abreast of advances in antenatal diagnosis. ★★★

1125 Halstead Bayou (39564)

References

1. Bombard AT, and Elias, S. (1986): New Techniques for Prenatal Diagnosis. *Diagn.* 8(10):67.
2. Jacobs PA, Melville M, Ratcliffe S., Keay AJ, Syme J (1974): A cytogenetic surgery of 11,680 newborn infants. *Ann Hum Genet* 37:359.
3. Kuleshov, NP (1976): Chromosomal anomalies in infants dying during the perinatal period and premature newborn. *Hum Genet* 31:151.
4. Simpson JL, Verp MS (1982): The prenatal diagnosis of genetic disorders. *Clin Obstet Gynecol* 25:635.
5. Hook EB, Cross PK, Schreinemachers, DM (1983): Chromosomal abnormality rates at amniocentesis and live-born infants. *JAMA* 249:2034.
6. Elias S, Simpson JL, Martin AO, Sabbagna RE, Bombard AT, Rosinsky BJ, Baum, LD (1986): Chorionic villus sampling in continuing pregnancies. I. Low fetal loss rates in initial 109 cases. *AM J Obstet Gynecol* 154:1349-1352.
7. Romero P, Jeanty P, Reece EA, Grannum P, Brachen M, Berkowitz R, Hobbins JC (1985): Sonographically monitored amniocentesis to decrease intraoperative complications. *Obstet Gynecol* 65:426.
8. Hook EB (1981): Rates of chromosomal abnormalities at different maternal ages. *Obstet Gynecol* 58(3):282.

ORDER
NOW FOR
CHRISTMAS!

The Great Entertainers.



Your investment
into the exciting
world of home
billiards can be
your family's
best entertainment
value.

For color brochure & price list, call today.

Central Mississippi Amusements

(601) 982-2525

Showroom: 210 Culley Dr., Jackson



THE PRESIDENT'S PAGE

DAVID R. STECKLER, M.D.

Strategic Planning Project — A Preliminary Report

I HAVE PREVIOUSLY NOTED the strategic planning project we are conducting this year as being one of the most important activities in the history of our association. One significant part of the project has been a membership survey. The survey has recently concluded and I am pleased to report that some 75 percent of our members responded. This high response rate is due in no small part to the efforts of the MSMA Auxiliary who conducted a phone-a-thon to urge a reply from every member of the association who didn't answer one of the mail solicitations.

Some of the more salient findings of the survey can be reported now and a complete analysis will be presented in the *Journal MSMA* and at meetings for the membership later this year.

In a listing of 14 current health issues which you were asked to rate "very important," "important," "somewhat important" or "not at all important," three issues were rated "very important" by over two-thirds of the respondents. They were professional liability/malpractice issues, the public image of the profession and government regulation of medicine. Perhaps not surprisingly, professional liability/malpractice issues led the list with a 81 percent "very important" rating.

We also had overwhelming agreement on a number of points with respect to "organized medicine in Mississippi" defined for purposes of the survey as the Mississippi State Medical Association, the Mississippi Foundation for Medical Care, the Medical Assurance Company of Mississippi and the Mississippi Physicians Health Insurance Company. Namely, two-thirds of the respondents believe that they can participate fully in these organizations, that legislative lobbying is the best way to exert the profession's power and that MSMA is an effective representative for physicians in the legislature. On the other hand, and indicating one of several areas where new efforts need to be forthcoming, almost two-thirds of the respondents believe that "organized medicine" in Mississippi is not well coordinated.

Future activities of the strategic planning project will include development of "mission statements" for each of the organizations comprising organized medicine in Mississippi and then consideration of the best organizational structure(s) to accomplish these mission statements. Most importantly, as part of these activities meetings will be held with you throughout the state.

A handwritten signature in dark ink, appearing to read "David R. Steckler". The signature is fluid and cursive, with a long horizontal line extending from the end.

About . . . Face!

One of my pet treatments all these years has been acne. The children do well; the parents are happy; and most of the time their face is "saved" from the ravages that can befall those beautiful people. I am not certain whether it has been due to or in spite of my treatment, though, for as you know, the treatment has changed radically in all these years since I started treating acne.

It once was (1) a lecture on diet; ie, no chocolate, fish, iodized salt, etc., etc., (2) use one of those wicked little tools to express each little pimple, (3) use of the harshest soap — P&G, Octagon, or Lava would do just fine, (4) large doses of Vitamin A by mouth, and (5) vigorous use of exfoliatives (you had to "peel that old dead layer of skin off so the pores would drain").

Now, for the most part, you don't do any of those things. Diet makes little difference; use the mildest soap; don't scrub the face hard or do any of those things that might bruise the skin; rarely use exfoliatives and I haven't used megadose Vitamin A in years. Some bright person found an "acne bacillus" as the critter causing the problem, so now I rely on antibiotic lotions and long term-low dose antibiotics by mouth. Whether due to lack of compliance, expectation of a quick cure, or what, I send about 15% of the recalcitrant acne patients to the dermatologist.

It's very disheartening though, this treatment change — sort of like telling you there isn't any Santa Claus. But who knows, it may be like those wide lapels and wide ties. Hold on to them, maybe they'll come back in style again.

Thank God I'm a physician in this world of change.

J. E. JOHNSTON, M.D.
Associate Editor

Medico-Legal Brief**Federal Court Enjoins
Regulations That Bar
Abortion Counseling**

Regulations prohibiting counseling and referral for abortions by family planning services that received federal funds should be enjoined, a federal trial court in Colorado ruled.

Title X of the Public Health Service Act prohibited federal funding for programs in which abortion was a method of family planning. Regulations promulgated on February 2, 1988, provided that family planning clinics that received federal funds may not provide counseling concerning abortion or referral for abortion as a method of family planning.

The court ruled that the regulations were unconstitutional, saying that they were not authorized by the statute. Neither congressional history nor interpretations of the statute by the Health and Human Services Department supported a finding that Congress intended to prohibit family planning clinics from providing women with access to information about abortions. Congressional policy permitted neutral dissemination of information about abortions, and the regulations prevented that, the court said.

The regulations violated a women's right to choose whether to have an abortion, her right to receive necessary information, and her physician's right to disseminate necessary medical information to patients, the court concluded. — *Planned Parenthood Federation of America v. Bowen*, 680 F.Supp. 1465 (D.C., Colo., Feb. 25, 1988)

LETTERS

(Editor's Note: The letter below is a copy of one sent to Blue Cross and Blue Shield of Mississippi.)
TO MR. JAMES C. BETHEA:

We are protesting your "Key Physician Network" proposals. Patients have the right to assign payment to the physician if they so choose. By your denying patients this right and arbitrarily sending insurance payments directly to them, you cause several problems:

1. You put patients to the trouble of having to bring or mail in an additional payment.

2. You tempt patients to pocket and spend this money. That makes it more difficult for the patients to pay for their services, increases delinquency, and increases the need for collection agencies and litigation.

3. The patient-physician relationship is then strained when patients illegally fail to submit those insurance payments for services rendered. Also if that insurance payment is pocketed by the patient, it limits his access to convenient medical care when the physician is forced to advise these patients to seek care elsewhere.

4. Furthermore, this will cause more physicians to demand payment for surgical, obstetrical, and other services in advance to avoid the above mentioned problems. This will not only cause extreme inconvenience, but will also certainly limit subscribers' "freedom to choose their own physicians."

There are other problems with this plan. First, it will put you, a for-profit insurance company, in a position to set fees without regard to physician expenses. This is a very disturbing thought — especially to physicians who practice obstetrics and other high risk specialties under the shadow of ever rising malpractice insurance premiums. Secondly, your arbitrary refusal to honor a patient's voluntary assignment of insurance payments to the non-Network physician may be "legal"; however, morally it seems to be a type of blackmail to coerce physician submission.

It is also quite interesting that insurance companies do not seem to mind using "assignment" type payments when it comes to collecting their premiums. It takes the form of encouraging employers to withhold employee insurance payments, and also using "automatic bank drafts" on subscribers' accounts. Suppose that one or several large banking systems in the state suddenly threatened not to honor "automatic bank drafts" unless an insurance company joined the "Key Insurance Company Network," and then justified that action (despite many depositors' wishes) on a clause in some contract signed on opening an account. Blue Cross/Blue Shield would probably be quite upset over such a turn of events.

We are totally against this program as presently instituted. Furthermore, we intend to let our patients know how Blue Cross is trying to restrict their freedom to use the physician of their choice.

EDWARD PENNINGTON, M.D.

P. MORRIS PARSONS, M.D.

JOHN G. SHIELDS, M.D.

Ackerman, MS

BOOK REVIEW

Neuroanatomy: An Atlas of Structures, Sections and Systems. Duane E. Haines, Ph.D. Baltimore, Maryland: Urban & Schwarzenberg, 1987. \$22.00.

This atlas achieves the author's goal of providing maximum useful neuroanatomical information in an integrated manner. It should be helpful to both old and young students of the nervous system.

The color coding of vessels in Chapter 2 is a significant improvement. The addition of MRI scan data cross-correlated with CT data and the original pathological brain slices in Chapter 8 is also a distinct improvement in keeping the reader current.

Plates 5-6, 5-13, 5-18, 5-26, and 5-37 dealing with internal zones of arterial blood supply remain a strong portion of the atlas. The synopsis of functional components, tracts, pathways, and sensory systems with blank master drawings is equally strong in aiding better understanding of nervous system relays.

Authors of medical publications and records should not apologize for using clearly delineated abbreviations since the real world of law, commerce, and government is filled with less obvious abbreviations.

Somehow this atlas strikes a happy mean between being too simple with inadequate detail and too complex with excessive detail, thus causing the reader to miss seeing the forest for the trees. The price (\$22.50) is right and actually a bargain in today's world.

ANCEL C. TIPTON, JR., M.D.

MEDICAL ORGANIZATION

Dr. Moore Installed As MAFP President

Dr. Malcolm S. Moore of Tupelo was installed as president of the Mississippi Academy of Family Physicians at their recent annual scientific assembly held in Biloxi.

Elected to other leadership posts in the Academy were: Drs. George Bush of Laurel, president-elect; James Stingily of Hazlehurst, vice president; and Stanley Hartness of Kosciusko, secretary-treasurer. Dr. J. Edward Hill of Hollandale was elected delegate to the American Academy of Family Practice, and Dr. Walter Rose of Indianola was named alternate delegate.

In other elections, five physicians were chosen to serve two-year terms as directors: Drs. John Hassell of Laurel, Judy Gearhart of Clinton, Walter Johnston of Vicksburg, Michael Ard of Louisville, and Nell Moore of Tupelo.

Dr. Tom Mitchell of Vicksburg received the Family Doctor of the Year Award. The annual award is

presented to a family physician who has demonstrated outstanding leadership and service to family medicine in Mississippi.

Receiving other MAFP awards were Dr. David Hall, outstanding resident in family medicine, and Bobbi Adcock, outstanding senior in family medicine.

The scientific program, directed by Dr. Walter Johnston of Vicksburg, included updates on cardiology, sports medicine, fibromyositis, smoking cessation, low back pain, and pulmonary disease.

Barnard Distinguished Professors Named

Four University of Mississippi Medical Center faculty members have been named Frederick A. P. Barnard Distinguished Professors by University of Mississippi Chancellor R. Gerald Turner.

They are Dr. William Clem, Dr. Arthur Guyton, Dr. Herbert Langford and Dr. Albert Wahba.

The new professorships "recognize faculty whose careers have enhanced the national and international reputation of the University," said Dr. Turner. The awards honor Dr. Barnard, "the most renowned of all our chief executive officers," said Dr. Turner. Dr. Barnard was an "outstanding teacher, scholar and researcher" who later became president of Columbia University.

UMC vice chancellor Dr. Norman Nelson said, "These four who have been named Barnard Professors are indicative of the caliber of our entire Medical Center faculty. We are enormously proud of their accomplishments and pleased with this recognition of their international stature."

Dr. Clem, professor of microbiology and chairman of the department since 1979, is widely recognized by the scientific community for his contributions in describing the evolutionary development of the immune system. He has described the effects of temperature on immunity more extensively than any scientist in the world. He is a member of the immunobiology study section of the National Institutes of Health and has served on the microbiology test committee of the National Board of Medical Examiners.

Dr. Guyton joined the University faculty in 1947 and came to Jackson when the Medical Center opened in 1955 as professor of physiology and bio-



Dr. Malcolm Moore of Tupelo, right, was installed as president of the Mississippi Academy of Family Physicians. He succeeds Dr. Walter Gunn of Quitman, left.

physics and chairman of the department. He is internationally known for his contributions to cardiovascular physiology and for his *Textbook of Medical Physiology*, used by more medical students worldwide than any other textbook. The scientific community has honored him many times for his work, and he has served as president of numerous professional organizations including the American Physiology Society and the Federated Societies of Experimental Biology.

Dr. Langford is professor of medicine and director of the UMC Division of Endocrinology and Hypertension. He is a noted world authority on high blood pressure primarily for his research which has described the dietary factors which influence high blood pressure and for his pivotal role in several

major national clinical studies sponsored by the National Institutes of Health. Dr. Langford has received the Award for Individual Achievement from the National High Blood Pressure Education Program and the Silver Distinguished Achievement Award from the American Heart Association.

Dr. Wahba is professor of biochemistry and chairman of the department. During the sixties, he played a key role in the elucidation of the genetic code. Since then, he has made major contributions to identifying the protein factors involved in protein synthesis. Dr. Wahba reviews grants for the American Cancer Society, the National Institutes of Health and the National Science Foundation. He is a referee for the journals *Biochemistry*, *Journal of Biological Chemistry*, *Gene*, and *Nucleic Acids Research*.

Barnard Distinguished Professors Named At Medical Center



University of Mississippi Chancellor R. Gerald Turner announced the first four Frederick A. P. Barnard Distinguished Professors at the University of Mississippi Medical Center. They are, from left, Dr. William Clem, Dr. Arthur Guyton, Dr. Albert Wahba, and seated, Dr. Herbert Langford.

Thirteen Faculty Appointments Made at UMC

Thirteen have been named in faculty appointments to the Schools of Medicine, Nursing, Health Related Professions and Centerwide at the University of Mississippi Medical Center for the current academic session.

Dr. Norman C. Nelson, UMC vice chancellor for health affairs, announced the appointments following approval by the Board of Trustees of State Institution of Higher Learning.

Appointments in the School of Medicine included Dr. Carolyn L. Bigelow, assistant professor of medicine; Dr. Peter E. Dorsett, associate professor of psychiatry and human behavior; Edward E. Ridgon, assistant professor of surgery; Kanaka D. Tumu, instructor in surgery; and Emily W. Ward, assistant professor of pathology.

In the School of Nursing, Shirley S. Powell was named instructor in nursing.

School of Health Related Professions appointments included David L. Freels and Rosemarie Harris, instructors in emergency medical technology, and Dolores K. Goldmeyer, instructor in health record administration.

Centerwide, Kurt R. Brunden was named assistant professor of biochemistry; and Douglas E. Fitzovich, Drew Hildebrandt and Bruce N. Van Vliet, instructors in physiology and biophysics.

Dr. Bigelow earned the B.S. in 1974 at Rhodes College in Memphis, and the M.D. in 1979 at UMC, where she took her internship and residency. She took a fellowship from 1983-1987 at the University of Washington in Seattle, and has been acting instructor in medicine there and an associate in clinical research at the Fred Hutchinson Cancer Research Center since 1987.

Dr. Dorsett attended Tulane University and Millsaps College and earned the M.D. with honors at UMC. He took his internship at North Carolina Memorial Hospital at Chapel Hill, residencies at the Children's Hospital Medical Center in Boston, and Louisiana State University School of Medicine in New Orleans, with fellowships at the Children's Hospital Medical Center and Judge Baker Guidance Center in Boston. He was a major in the U.S. Army Medical Corps and staff pediatrician at Martin Army Hospital at Fort Denning, Georgia from 1968-1970. He has been on the medical staff at Ochsher Clinic, DePaul Hospital and the Coliseum Medical Center, and in private practice in psychiatry in New Orleans. He also has been on faculty at the Children's Hospital Medical Center and Harvard Medical School

CARRY LESS WEIGHT AT THE OFFICE.

The more you have on your mind, the less you should have on your feet. That's why we created DresSports®. Like other dress shoes, they look stylish. Unlike other dress shoes, they're lightweight, flexible, cushioned, and they actually feel good.

After all, your feet shouldn't slow you down on your way up.

Rockport
Marlboro, Mass.



20% Professional Discount

Pennington's Shoes

1151 North State Street

Suite 112

Medical Arts Building

Jackson, Mississippi 39201-2407

Telephone (601) 355-7574

as instructor in pediatrics and psychiatry and at the LSU School of Medicine as assistant professor of psychiatry and director of training in child and adolescent psychiatry.

Dr. Rigdon is a 1974 graduate of highest distinction of Mississippi State University. He earned his medical degree magna cum laude in 1978 at UMC. He took his internship at the University of Alabama at Birmingham and residencies at UMC. From 1984-1986, he was on the medical staff at the U.S. Naval Hospital at Keflavic, Iceland, then returned to Laurel and entered private practice.

Dr. Tumu attended St. Theresa's College at Eluru, India and earned her medical degree at Gunter Medical College in Andhra Pradesh, India. She took her internship at Osmania General Hospital at Hyderabad, A.P., India and was chief resident at Methodist Hospital in Brooklyn, New York.

Dr. Ward earned the B.A. in 1977 at Southern Methodist University in Dallas, and the M.D. in 1981 at Jefferson Medical College in Philadelphia, Pennsylvania. She took her internship at the Thomas Jefferson University Hospital in Philadelphia, a residency at UMC and fellowship at the University of Alabama at Birmingham.

UMC Announces Eight Faculty Appointments

Eight have been named in appointment to the faculty of the University of Mississippi Medical Center for the current academic session.

Dr. Norman C. Nelson, UMC vice chancellor for health affairs, announced the appointments following approval by the Board of Trustees of State Institutions of Higher Learning.

Appointments in the School of Medicine were Dr. Michael Coleman Graeber and Dr. Eric K. Undesser, assistant professors of neurology.

Katherine F. Watts was named assistant professor of nursing in the School of Nursing.

In the School of Health Related Professions, Libby M. Spence was named instructor in medical technology.

Dr. Venkateswarlu Veerisetty was appointed instructor in periodontics in the School of Dentistry.

Centerwide, Dr. H. Leland Mizelle was named assistant professor of physiology and biophysics.

Dr. Graeber earned the B.A. cum laude in 1980 at Ole Miss and the M.D. in 1984 at the University of Mississippi Medical Center where he took his

TOURO I N F I R M A R Y

CENTER FOR CHRONIC PAIN AND DISABILITY REHABILITATION

- Comprehensive combined evaluation and treatment
- 4 to 5 week inpatient program
- Rehab/medication/emotional management
- Preadmission review and interview of all cases
- Accredited by the Commission on Accreditation of Rehabilitation Facilities
- Multi-specialty team selection of consultants
- Weekly reports and conferences
- Physical capacity and work evaluation
- Physician referrals
- 11 years New Orleans experience with 1,400 patients

Referrals/Info

Jackie Chauvet (504) 897-8404

R.H. Morse, M.D.

Medical Director

internship and was chief resident in neurology before the Medical Center appointment.

Dr. Undesser earned the B.A. in 1973 at the University of California at San Diego, the Ph.D. in 1979 at the University of Texas Medical Branch at Galveston and the M.D. in 1984 at the University of Texas Health Science Center at San Antonio where he was a teaching and research assistant. He took his internship at the University of Texas Teaching Hospitals and his residency in neurology at the Medical Center prior to his appointment to the faculty.

Ms. Watts earned the B.S.N. in 1966 and the M.N. in 1976 at UMC. She was instructor in nursing at Jones County Junior College in Ellisville from 1966-1967, and was instructor and assistant professor of nursing at UMC from 1969-1987. She also has been a member of the nursing staff at Forest General Hospital in Hattiesburg and Hinds General Hospital in Jackson.

Ms. Spence earned the B.S. in 1979 and the B.S.E. and M.S.E. in 1986 at Arkansas State University. She also took postgraduate studies at the University of Southern Mississippi in 1988. She has been a staff technologist at Arkansas Methodist Hospital and Paragould Pathology Laboratory at Paragould, Arkansas, and a supervisor at St. Bernard's Regional Medical Center at Jonesboro, Arkansas.

Dr. Veerisetty earned the B.Sc. in 1970 at the Andhra Pradesh Agricultural University, the M.Sc. in 1972 at the India Agricultural Research Institute. He earned the Ph.D. in 1976 at the University of Nebraska and the D.M.D. in 1988 at the UMC where he was a dean's list scholar.

Dr. Mizelle earned the B.A. in 1982 at the University of South Alabama in Mobile, and the Ph.D. in 1987 at UMC. He was a research associate at the Medical Center before his appointment to the faculty.

TERMS WE THINK YOU'LL LIKE...

Compare these low non-smoker annual rates for non-decreasing graded premium life:

MALE AGES	\$250,000	\$500,000	\$1,000,000
25	250.00	455.00	670.00
30	252.50	460.00	677.50
35	255.00	465.00	685.00
40	330.00	595.00	880.00
45	412.50	760.00	1,127.50
50	542.50	1,015.00	1,510.00
55	810.00	1,520.00	2,267.50
60	1,355.00	2,535.00	3,790.00
65	2,372.50	4,385.00	6,565.00

(smoker's rates slightly higher)

Renewable to age 100. Female rates same as males four years younger. All coverage provided by companies rated "A Excellent" by A.M. Best Co.

For a written quotation and policy description, call or send your date of birth and amount of coverage desired to.



SCHOENFELD
FINANCIAL COMPANIES

2970 COTTAGE HILL ROAD • SUITE 201
MOBILE, ALABAMA 36606
205/471-1340

PRINTING — OFFICE SUPPLIES

EQUIPMENT — FURNITURE



Premier Printing Company

2485 West Capitol

Jackson, Mississippi

Phone 352-4091



UMC Board Members Observe NICU Operations



Members of the Board of Trustees of State Institutions of Higher Learning took a look at operations in the newborn intensive care unit of Children's Hospital during a tour of University of Mississippi Medical Center facilities. Standing from left are Dr. Joe A. Haynes of Jackson; James W. Luvene of Holly Springs; J. Marlin Ivey of Kosciusko, chairman of the Board's Medical Affairs Committee, and Mrs. Ivey and Nan M. Baker of Winona, with Dr. Glen R. Graves, assistant professor of pediatrics (newborn medicine). The Medical Center NICU is the state's only level III center for managing high risk babies.

Dr. Bishop Named To UMC Faculty

Dr. Andrew C. Bishop has been appointed assistant professor of psychiatry and human behavior in the School of Medicine at the University of Mississippi Medical Center for the current academic session.

Dr. Norman C. Nelson, UMC vice chancellor for health affairs and medical school dean, announced the appointment following approval by the Board of Trustees of State Institutions of Higher Learning.

Dr. Bishop had been clinical instructor in psychiatry at Louisiana State University Medical Center at the E. A. Conway Hospital and a member of the

medical staff at Monroe Mental Health Center in Monroe, Louisiana since 1986. He also had been medical director for the Adolescent Treatment Unit and the Center for Adolescent Development at Woodland Hills Hospital in Monroe since 1987.

Dr. Bishop earned the B.S. in 1978 at Millsaps College and the M.D. in 1982 at UMC, where he took his internship and was chief resident in psychiatry.

He has been a consultant to the Southwest Mississippi Mental Health Complex in McComb and Ellisville State School in Ellisville and psychiatric examiner for Hinds County Court. He was medical director of the CarePsych Unit at St. Francis Medical Center in Monroe, Louisiana from 1986-1987.

Introducing a new company with an array of services for physicians.

Perhaps you are thinking of adding to your practice and would like:

- A physician to help with the patient load,
- An affiliate in your facility to share costs, or
- A partner until you are ready to retire.

Perhaps you are considering selling your practice and need:

- An assessment of your practice for the purpose of marketing,
- An appraisal of the furnishings, accounts receivables, and good will,
- An individual to act as your agent.

Perhaps you are wondering about the current condition of your practice and need:

- Consultation on accounts receivables,
- Consultation on billing and collections, or
- Help with staff training.

Perhaps you are planning to start a practice and need help:

- Setting it up,
- Acquiring furniture, equipment and supplies,
- Selecting and training your staff.



Frank Cochran

Perhaps you are considering purchasing an existing practice and need:

- Someone with experience to consult with in the process, or
- Someone to act as your agent.

After 11 years of providing the above services for physicians in West Central Alabama, I have decided to serve all physicians in this capacity. I am available and can assist you with these and many other services related to practice management. For more information, please contact me at 205-556-8457.

QUALITY HEALTH RESOURCES

Post Office Box 6002 • Tuscaloosa, Alabama 35405 • (205) 556-8457

A Christian Organization — Operated on Christian principles.

UMC Infectious Diseases Division Has New Director

Dr. Stanley W. Chapman, associate professor of medicine at the University of Mississippi Medical Center, has been named director of the Division of Infectious Diseases in the Department of Medicine.

His promotion was announced following approval by the Board of Trustees of State Institutions of Higher Learning by Dr. Norman C. Nelson, vice chancellor for health affairs and medical school dean.

Dr. Chapman joined the School of Medicine faculty in 1979 as assistant professor of medicine. He was instructor in medicine (infectious disease) at the University of Rochester School of Medicine and Dentistry in New York since 1977. He held positions as clinical associate and medical officer from 1974-1977 in the Laboratory of Clinical Investigation of the National Institutes of Allergy and Infectious Diseases, National Institutes of Health at Bethesda, Maryland. He also has been chief of the Infectious Diseases Section of the Jackson Veterans Administration Medical Center since 1979, and chief of medical service there since 1983. He was promoted to the rank of associate professor of medicine at the Medical Center in 1984, and was named acting chief of the Division of Infectious Diseases in 1985.

A member of Phi Beta Kappa, Dr. Chapman

earned the A.B. cum laude in 1968 at Colgate University in Hamilton, New York. He earned the M.D. in 1972 at the University of Rochester, where he was a member of Alpha Omega Alpha, honorary medical fraternity, and took his internship and residency at Emory University Affiliated Hospital in Atlanta. He took fellowships in allergy and immunology and in infectious disease at the National Institute of Allergy and Infectious Diseases of the National Institutes of Health and the University of Rochester School of Medicine and Dentistry.

Dr. Chapman is board certified in internal medicine, allergy and immunology and infectious disease, and is a fellow of the American College of Physicians, American College of Chest Physicians and the Infectious Disease Society of America. He holds memberships in the American Federation for Clinical Research, American Association for the Advancement of Science, American Society for Microbiology, American Academy of Allergy, American Thoracic Society, International Society of Human and Animal Mycology, Mississippi Thoracic Society, Mississippi Academy of Sciences and the Jackson Academy of Medicine.

A Lieutenant Commander with the U.S. Public Health Service from 1974-1977, he was appointed Major in the Mississippi Air National Guard in 1981 and promoted to Lieutenant Colonel in 1986.

He is author or coauthor of many scientific publications including a number of book chapters.




Doctor,

Have you ever looked for a different way to say "Thank You," "Congratulations," or "Get Well Soon"?

All of these messages are available, along with memorial tributes, in greeting cards from the MSMA Auxiliary. Each card signifies your donation to the AMA-ERF in the name of a friend or colleague.

For information about AMA-ERF greeting cards for year-round use, contact a member of your local MSMA Auxiliary, or Kathy Carmichael, 106 Colonial Place, Hattiesburg, MS 39401; telephone 268-9642.



WE'RE ALWAYS ON CALL. 1-800-352-2226

Call the travel specialists toll-free!

When you come down with the urge or necessity to travel, call Avanti for expert service. Everything we do for you is free of charge, even the phone call.

Our travel specialists will take care of all your plans, plane reservations, car rental, hotel accommodations and much more. We're here to help you with charters, tours, cruises, personal vacations, business meetings and conventions.

The next time you make travel arrangements, remember Avanti is always on call, toll-free.

AVANTI
TRAVEL, INC.

Three Lakeland Circle • Jackson, Mississippi 39216 • 981-9111
Call Toll-Free Nationwide 1-800-327-4236

POSTGRADUATE CALENDAR

November

EIGHTH ANNUAL COMMUNICATIVE DISORDERS SYM-
POSIUM: MANAGEMENT OF THE AGING

Nov. 4

University Medical Center

ADVANCED TRAUMA LIFE SUPPORT PROVIDER
COURSE

Nov. 10-11

University Medical Center

PEDIATRIC ANNUAL MEETING MISSISSIPPI CHAPTER
OF THE AMERICAN ACADEMY OF PEDIATRICS

Nov. 18-19

BLAIR BATSON APPRECIATION DINNER — A reunion
of UMC faculty and residents is scheduled for
November 18 to honor Dr. Blair Batson, profes-

sor of pediatrics and chairman of the department
upon the occasion of his retirement.

University Medical Center/Ramada Renaissance
Hotel, Jackson

HERPES VIRUS INFECTIONS IN THE COMPROMISED
HOST AND NEONATE

Nov. 16

University Medical Center

December

PERINATAL POSTGRADUATE UPDATE

Dec. 14, Special Nurses Session

Dec. 15-16, General Session

Ramada Renaissance Hotel, Jackson

For more information or a program brochure,
contact the University of Mississippi Medical Cen-
ter Division of Continuing Health Professional Ed-
ucation, 2500 North State Street, Jackson, Missis-
sippi 39216-4505; or call (601) 984-1300.

NAVAL RESERVE PHYSICIAN

- Monthly Stipend for Physicians in training leading to qualifying as General/Orthopedic/Neurosurgeon or anesthesiologist.
- Loan repayment of up to \$20,000 for Board eligible General/Orthopedic surgeons and anesthesiologists.
- CME opportunities.
- Flexible drilling options.

*Promotion Opportunities

*Prestige

*For graduates of AMA approved
Medical Schools*

**CALL YOUR
NAVAL RESERVE FORCE
REPRESENTATIVE TODAY.**

1-800-443-6419

MEETINGS

National and Regional

American Medical Association, Annual Meeting, June 18-22, 1989, Chicago. James H. Sammons, Executive Vice President, 535 N. Dearborn St., Chicago, IL 60610.

State and Local

Mississippi State Medical Association, 121st Annual Session, May 31-June 4, 1989, Biloxi. Charles L. Mathews, Executive Secy., 735 Riverside Drive, P.O. Box 5229, Jackson 39216.

Mississippi Academy of Family Physicians, Annual Meeting, Aug. 2-6, 1989, Gulf Shores, AL. Mrs. Alyce Palmore, Executive Secy., P.O. Box 1215 Ridgeland 39158.

Amite-Wilkinson Counties Medical Society, 3rd Monday, March, June, September, December. James S. Poole, Secy., The Gloster Clinic, Gloster 39638. Counties: Amite, Wilkinson.

Central Medical Society, 1st Tuesday, February, April, October, December, 6:30 p.m., Primos Northgate Restaurant, Jackson. Patsy Douglas, Executive Secy., 735 Riverside Dr., Jackson, MS 39202. Counties: Hinds, Leake, Madison, Rankin, Scott, Simpson.

Claiborne County Medical Society, 1st Tuesday, each month, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Secy., P.O. Box 147, Port Gibson 39150. County: Claiborne.

Clarksdale and Six Counties Medical Society, 3rd Wednesday, April, and 1st Wednesday, November, 2:00 P.M., Clarksdale, Rodney Baine, Secy., 110 Yazoo Ave., Clarksdale 38614. Counties: Coahoma, Quitman, Tallahatchie, Tunica.

Coast Counties Medical Society, January, May, and November. H. S. Barrett, Secy., P.O. Box 1810, Gulfport 39501. Counties: Hancock, Harrison, Stone.

Delta Medical Society, 2nd Wednesday, April and October. Walter H. Rose, Secy., 122 E. Baker St., Indianola 38751. Counties: Bolivar, Humphreys, Leflore, Sunflower, Washington, Yazoo.

DeSota County Medical Society, 3rd Thursday, February and August, 1:00 p.m., Kenny's Restaurant, Hernando. Malcolm D. Baxter, Jr., Secy., Baxter Clinic, Hernando 38632. County: DeSoto.

East Mississippi Medical Society, 1st Tuesday, February, April, June, October, December. Charles L. Wilkinson, Secy., Mail: Ms. Jenkins, P.O. Box 4053, Meridian 39305. Counties: Clarke, Kemper, Lauderdale, Neshoba, Newton, Winston.

Homochitto Valley Medical Society, Meetings scheduled quarterly. Fred G. Emrick, Secy., P.O. Box 1488, Natchez 39120. Counties: Adams, Jefferson.

North Central District Medical Society, 3rd Wednesday, March, June, September, January. George V. Smith, 905 Avent Dr., Grenada 38901. Counties: Attala, Carroll, Choctaw, Grenada, Holmes, Montgomery, Webster.

Northeast Mississippi Medical Society, 1st Thursday, March, June, September, December. Roger L. Lowery, Secy., 618 Pegram Dr., Tupelo 38801. Counties: Alcorn, Calhoun, Chickasaw, Itawamba, Lee, Monroe, Pontotoc, Prentiss, Tishomingo, Union.

North Mississippi Medical Society, 1st Thursday, April, September, December. W. A. Spencer, Secy., 2161 South Lamar, Oxford 38655. Counties: Benton, Lafayette, Marshall, Panola, Tate, Tippah, Yalobusha.

Pearl River County Medical Society, 2nd Monday, March, June, September, December. J. C. Griffing, Secy., Crosby Memorial Hospital, Picayune 39466. County: Pearl River.

Prairie Medical Society, 2nd Tuesday, March, June, September, December. Perrin N. Smith, Secy., P.O. Box 9000, Columbus 39705. Counties: Clay, Oktibbeha, Noxubee, Lowndes.

Singing River Medical Society, quarterly, December, March, June and September. John J. McClosky, Secy., 3003 Short Cut Rd., Pascagoula 39567. County: Jackson.

South Central Mississippi Medical Society, 2nd Tuesday, March, June, September, December. Julian T. Janes, Secy., 304 Clark, McComb 39648. Counties: Copiah, Franklin, Lawrence, Lincoln, Pike, Walthall.

South Mississippi Medical Society, 2nd Thursday, March, June, September, December. George R. Bush, Secy., 307 S. 13th Ave., Laurel 39440. Counties: Covington, Forrest, George, Greene, Jasper, Jefferson Davis, Jones, Lamar, Marion, Perry, Smith, Wayne.

West Mississippi Medical Society, 2nd Tuesday, January, March, May, September, October, November, 6:30 p.m., Maxwell's Restaurant, Vicksburg. Wayne M. Petrie, Secy., 1202 Mission Park Dr., Vicksburg 39180. Counties: Issaquena, Sharkey, Warren.

Mississippi Institutions and Organizations Accredited for Continuing Medical Education

The following Mississippi institutions and medical organizations have been accredited in accordance with the "Essentials for Accreditation of Institutions and Organizations Offering Continuing Medical Education Programs" of the Liaison Committee on Continuing Medical Education. Information concerning CME programs for physicians offered by these accredited sources may be obtained by writing the Director, Continuing Medical Education, at the individual institution or organization.

Council on Scientific Assembly
Mississippi State Medical Association
735 Riverside Drive
Jackson, MS 39202

North Mississippi Medical Center
830 Gloster Avenue
Tupelo, MS 38801

Forrest General Hospital
Box 1897
Hattiesburg, MS 39401

Mississippi Baptist Medical Center
1225 N. State Street
Jackson, MS 39201

Gulf Coast Community Hospital
4642 W. Beach Boulevard
Biloxi, MS 39531

Jefferson Davis Memorial Hospital
Box 1488
Natchez, MS 39120

King's Daughter Hospital
Box 948
Brookhaven, MS 39601

Riverside Hospital
Lakeland Drive
Jackson, MS 39208

Biloxi Regional Medical Center
1559 Lafayette St.
Biloxi, MS 39533

Jeff Anderson Regional Medical Center
2124 14th St.
Meridian, MS 39301

Northwest Mississippi Regional Medical Center
Box 1218
Clarksdale, MS 38614

North Panola County Hospital
Drawer 160
Sardis, MS 38666

Singing River Hospital
P.O. Box 112
Pascagoula, MS 39567

Magnolia Hospital
Alcorn Drive
Corinth, MS 38834

Greenwood Leflore Hospital
1508 Leflore Avenue
Greenwood, MS 38930

Gulfport Memorial Hospital
4500 13th Street
Gulfport, MS 39501

Oxford-Lafayette County Hospital
P.O. Box 946
Oxford, MS 38655

St. Dominic-Jackson Memorial Hospital
969 Lakeland Dr.
Jackson, MS 39216

Delta Medical Center
P.O. Box 5247
Crossroads Station
Greenville, MS 39704-5247

Methodist Hospital
P.O. Box 1311
Hattiesburg, MS 39401

**You're
a Professional.**

**You need Professional
Health Insurance
Coverage.**

MSMA

Benefit Plan and Trust

MSMA Benefit Plan and Trust is a superior insurance program which fulfills the quality of coverage and affordability that everyone wants.

Sponsored by the Mississippi State Medical Association, the MSMA Benefit Plan and Trust offers life and health benefits to physician members of MSMA, their employees and families.

- \$1,000,000 lifetime benefits.
- Life Coverage up to \$50,000.
- Broad benefits with fair and equitable rates.
- Management by and for physicians.
- Non-profit and administered at lowest possible cost.

For Complete Description of Benefits Write:

MSMA Benefit Plan and Trust

P.O. Box 55509
Jackson, MS 39216



ROSALYN P. STERLING-SCOTT, M.D.

Assistant Professor of Surgery, UCLA School of Medicine and Drew University of Medicine and Science, Los Angeles

Associate Surgeon, Department of Cardiovascular & Thoracic Surgery, Centinela Hospital Medical Center, Los Angeles

Major, U.S. Army Reserve

EDUCATION Rensselaer Polytechnic Institute, Troy, NY, B.S. Chemistry; NYU School of Medicine, New York, M.D.

RESIDENCY Boston University School of Medicine (Cardiovascular); Saint Vincent's and St. Claire's Hospitals, New York City (General Surgery)

FELLOWSHIP First Mary A. Fraley Cardiovascular Surgical Research Fellow at the Texas Heart Institute, Houston

OUTSTANDING ACHIEVEMENTS Author of numerous articles, including "Indications for Early Bypass Grafting Following Intracoronary Streptokinase"; author of "The Female Surgeon—Dawn of a New Era," chapter in *A Century of Black Surgeons—The U.S.A. Experience*; Board of Directors, Association of Black Cardiologists; Secretary, Drew Society

“The caliber of physicians you meet in the Army Reserve exposes you to new ways of looking at a problem. It's easy for young surgeons to become entrenched in one method, but in the Army Reserve you'll have the chance to work with outstanding physicians in your own specialty, and often learn new ideas that will help you to improve your own approach to clinical or research problems,” says Dr. Sterling-Scott.

The Army Reserve can offer physicians a variety of challenging options such as teaching, research, unique training programs, and the opportunity to practice in prestigious Army medical centers.

“Joining the Army Reserve enabled me to take advantage of a number of conferences, including one at Walter Reed, where I worked with thoracic surgical colleagues, while conducting my own research project.”

We understand the time demands on a busy physician. So the Army Reserve offers training programs that will allow you to be flexible about the time you serve.

For more information about specific programs, call toll-free 1-800-USA-ARMY.

**ARMY RESERVE MEDICINE.
BE ALL YOU CAN BE.**



THE LOWER RESPIRATORY TRACT— More vulnerable to infection in smokers and older adults



Experience counts

Ceclor[®]
Pulvules[®]
250 mg
cefaclor
think of it first

For respiratory tract infections due to susceptible strains of indicated organisms.

Summary.

Consult the package literature for prescribing information.

Indication: Lower respiratory infections, including pneumonia, caused by *Streptococcus pneumoniae*, *Haemophilus influenzae*, and *Streptococcus pyogenes* (group A B-hemolytic streptococci)

Contraindication: Known allergy to cephalosporins

Warnings: CECLOR SHOULD BE ADMINISTERED CAUTIOUSLY TO PENICILLIN-SENSITIVE PATIENTS. PENICILLINS AND CEPHALOSPORINS SHOW PARTIAL CROSS-ALLERGENICITY. POSSIBLE REACTIONS INCLUDE ANAPHYLAXIS.

Administer cautiously to allergic patients.

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics. It must be considered in differential diagnosis of antibiotic-associated diarrhea. Colon flora is altered by broad-spectrum antibiotic treatment, possibly resulting in antibiotic-associated colitis.

Precautions:

- Discontinue Ceclor in the event of allergic reactions to it.
- Prolonged use may result in overgrowth of nonsusceptible organisms.
- Positive direct Coombs' tests have been reported during treatment with cephalosporins.
- Ceclor should be administered with caution in the presence of markedly impaired renal function. Although dosage adjustments in

moderate to severe renal impairment are usually not required, careful clinical observation and laboratory studies should be made.

- Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.
- Safety and effectiveness have not been determined in pregnancy, lactation, and infants less than one month old. Ceclor penetrates mother's milk. Exercise caution in prescribing for these patients.

Adverse Reactions: (percentage of patients)

Therapy-related adverse reactions are uncommon. Those reported include:

- Gastrointestinal (mostly diarrhea) 25%
 - Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment.
 - Hypersensitivity reactions (including morbilliform eruptions, pruritus, urticaria, and serum-sickness-like reactions that have included erythema multiforme [rarely, Stevens-Johnson syndrome] and toxic epidermal necrolysis or the above skin manifestations accompanied by arthritis/arthritis, and frequently, fever) 15%.
- usually subside within a few days after cessation of therapy. Serum-sickness-like reactions have been reported more frequently in children than in adults and have usually occurred during or following a second course of therapy with Ceclor. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.

- Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.
- As with some penicillins and some other cephalosporins, transient hepatitis and cholestatic jaundice have been reported rarely.
- Rarely, reversible hyperactivity, nervousness, insomnia, confusion, hypertonemia, dizziness, and somnolence have been reported.
- Other: eosinophilia, 2%, genital pruritus or vaginitis, less than 1% and, rarely, thrombocytopenia.

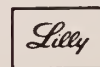
Abnormalities in laboratory results of uncertain etiology

- Slight elevations in hepatic enzymes
- Transient fluctuations in leukocyte count (especially in infants and children)
- Abnormal urinalysis, elevations in BUN or serum creatinine
- Positive direct Coombs' test
- False-positive tests for urinary glucose with Benedict's or Fehling's solution and Clinistix[®] tablets but not with Tes-Tape[®] (glucose enzymatic test strip, Lilly).

(061088L)

Additional information available from
Eli Lilly and Company, Indianapolis, Indiana 46285

PV 2351 AMP



Eli Lilly Industries, Inc.
Carolina, Puerto Rico 00630

PERSONALS

BRYAN BARKSDALE of Jackson spoke on physical exercise/training at a Vicksburg seminar for coaches and the public.

ALLAN T. BOMBARD of Biloxi presented a program on new technology in prenatal diagnosis at a recent meeting of Coast Counties Medical Society.

MICHAEL BROOKS of Laurel has been appointed by the Mississippi EENT Association to a three-year term as delegate to the American Academy of Otolaryngology.

MICHAEL BROSS of Jackson presented a symposium at a meeting of the American Psychological Association in Atlanta. He also received a Meritorious Achievement Award from the Mississippi Geriatric Education Center.

MARTHA ANN CARR announces the opening of her practice in cardiology at 127 Lameuse Street, Suite 207, in Biloxi.

ALTON B. COBB of Jackson spoke to the medical staff at the new Baptist Memorial Hospital-DeSoto in Southaven.

ROBERT K. COLLINS of Starkville has been named director of the Longest Student Health Center at Mississippi State University.

TOM COOPER of Clarksdale announces the association of VICTOR PANG for the practice of ophthalmology and eye surgery.

BRYAN COWAN of UMC presented a lecture at the Roanoke Valley Ob-Gyn Society meeting in Virginia and spoke at the annual meeting of the Association of Surgical Technologists in Biloxi.

BENJAMIN P. COUNCIL announces the opening of his office for the practice of head and neck surgery, ENT, allergy, facial cosmetic and plastic surgery at The Medical Center, 535 North 5th Avenue, in Laurel.

E. HOWELL CRAWFORD, JR. has associated with Hattiesburg Clinic, 415 South 28th Avenue, for the practice of gastroenterology.

EDWIN M. DAVIDSON of Gulfport announces the association of P. V. PANDE for the practice of hematology, internal medicine and oncology at Gulf Health Specialists, 110 Broad Avenue.

HENRY EDMONDSON has associated with the Laird Clinic of Family Medicine at 103 Doctor's Park in Starkville.

CARL EVERS of UMC was elected to the executive committee of the Gynecologic Oncology Group at the organization's recent annual meeting.

JAMES D. FLY of Jackson spoke at a meeting of the Simpson County Branch of the American Diabetes Association.

ALAN FREELAND of UMC taught an AO/ASIF basic and advanced course in San Diego, California.

PAUL D. FUCHS of Mound Bayou has passed the examination for the Certificate of Added Qualifications in Geriatric Medicine administered by the American Board of Family Practice and the American Board of Internal Medicine.

SHARON E. GAINES has associated with Delta Health Center in Mound Bayou for the practice of pediatrics.

FRED Y. GRANT has associated with Rush Medical Group, 1800 12th Street in Meridian, for the practice of obstetrics and gynecology.

MEDICAL CLINIC For Sale or Lease

Due to retirement, physician who has been at this location since 1955 wishes to sell or lease medical clinic. All medical equipment, including lab and x-ray, furniture and fixtures included.

2000 square-foot building on 30 × 208.6 lot with parking in the rear. Prime Northeast Jackson location, convenient to area hospitals. Two consultation rooms, three exam rooms, minor surgery room, nurse's office, laboratory and x-ray. Ideal for 2 doctors.

For more information, please contact:

Mr. Jack Lowery
Deposit Guaranty National Bank
Trust Division
601-354-8118

PERSONALS/Continued

JAMES GRIFFITH of UMC participated in an international conference on family therapy in Sulitjelma, Norway and conducted workshops with workers in the Norwegian mental health system.

C. MITCHELL HOLLAND has associated with King's Daughters Hospital in Brookhaven for the practice of pediatrics. He is associated with BERT BRADFORD of Brookhaven Children's Clinic.

WAYNE A. HUGHES of the Family Medical Clinic of Hattiesburg has completed the national board examination in geriatric medicine administered by the American Board of Family Practice and will receive a Certificate of Added Qualifications.

GARY JACKSON of Hattiesburg has been certified as a diplomate of the American Board of Orthopedic Surgery.

PRENTISS KEYES of DeKalb announces his retirement from the practice of medicine.

DOUGLAS LANIER of Gulfport has been elected a fellow of the American College of Physicians.

PATRICK LEHAN of UMC spoke at a meeting of the Capital Optimist Club in Jackson.

BILLY W. LONG of Jackson has been named by the Jackson Chamber of Commerce as one of 36 participants in the Leadership Jackson program.

JAMES MARTIN of UMC lectured at a meeting of the Southern Ob-Gyn Society of Ashville, North Carolina.

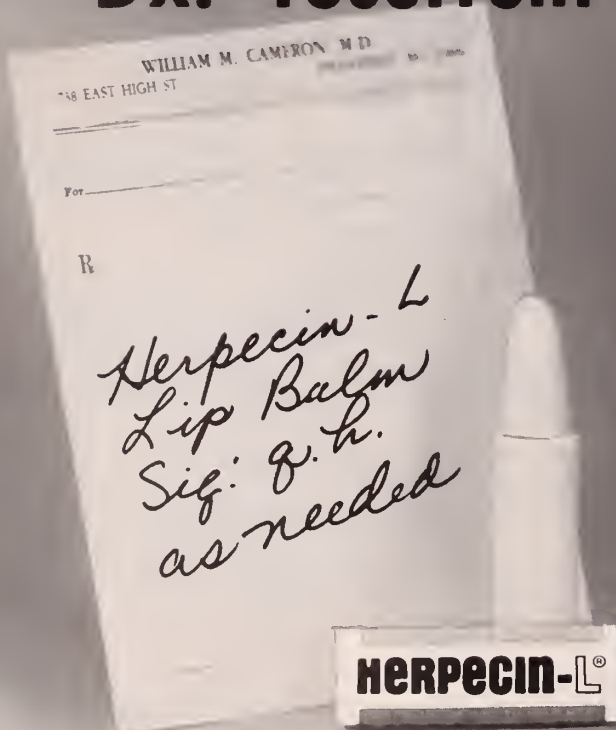
JOHN MORRISON of UMC participated in a Food and Drug Administration panel meeting and lectured at a meeting of the Southern Ob-Gyn Society in Ashville, North Carolina.

J. MARK MATTHEWS has associated with Internal Medicine Associates of Tupelo for the practice of internal medicine.

DAVID A. POMIERSKI has associated with Rush Medical Group in Meridian for the practice of orthopaedic surgery.

SESHADRI RAJU of UMC was visiting professor at the State University of New York in Syracuse.

Dx: recurrent herpes labialis



"HERPECIN-L is my **treatment of choice** for perioral herpes." GP, NY

"HERPECIN-L appears to actually **prevent** the blisters . . . used **soon enough**." DDS, MN

"HERPECIN-L® . . . a **conservative approach** with **low risk/high benefits**." MD, FL

"Used at **prodromal symptoms** . . . blisters **never formed** . . . remarkable." DH, MA

"(In clinical trials) . . . **response** was **dramatic**. **HERPECIN-L** . . . proven **far superior**." DDS, PA

"All patients claimed **shorter duration** . . . at **prodromal symptoms** . . . **HERPECIN-L averted** the attacks." MD, AK

OTC. See P.D.R. for information. For samples to make your own clinical evaluation, write: CAMPBELL LABORATORIES, INC., P.O. BOX 812-MD, FDR STATION, NEW YORK, N.Y. 10150

In Mississippi HERPECIN-L is available at all *Eckerd*, *K & B*, *Revco*, and *Super D* and other select pharmacies.

ROBERT H. SMITH, JR. has associated with WILLIAM C. HAIRE at the General Practice Clinic in Batesville.

TATE THIGPEN of UMC spoke on chemotherapy for breast cancer at a meeting of the medical staff at Oxford Lafayette Medical Center.

SAM C. TUMMINELLO announces the opening of his office for the practice of dermatology at 140 Jeff Davis Boulevard in Natchez.

JAMES D. TUTOR of Greenville has been certified by the American Board of Pediatrics.

GEORGE E. WILKERSON of Hattiesburg has been elected president of the Mississippi Neurological Society.

A. DUANE WILLIAMSON has associated with ROBERT C. STRONG, MERRILL D. HARDY and DARILYNN W. WILSON of Jackson for the practice of anesthesiology.

JOSEPH B. WITTY announces the opening of his office for the practice of obstetrics and gynecology and infertility at 2102 5th Street North, Suite 3, in Columbus.

DEATHS

BAILEY S. LAMAR, Kosciusko. Born Attala County, MS, Aug. 2, 1903; M.D., University of Tulane Medical School, New Orleans, 1925; one year internship, Charity Hospital, Jackson, MS; one year family practice residency, S.S. May & Elizabeth Hospital, Louisville, KY, 1928-29; died Aug. 9, 1988, age 85.

McGEHEE, JOSEPH C., Bolton. Born Liberty, MS, Feb. 8, 1916; M.D., University of Tennessee School of Medicine, 1954; interned, one year, Mississippi Baptist Hospital, Jackson, 1954-55; died Aug. 16, 1988, age 72.

MUTZIGER, DUDLEY H., Natchez. Born St. Joseph, MO, July 1, 1917; M.D., Louisiana State University School of Medicine, New Orleans, 1942; interned Hotel Dieu, New Orleans, 1942-43; rotating residency, Charity Hospital, New Orleans, 1946-67; died July 21, 1988, age 71.

PHILLIPS, HERBERT S., Holly Springs. Born Marshall Co., MS, May 7, 1904; M.D., Northwestern University Medical School, Chicago, 1928; interned and general practice residency, St. Louis City Hospitals, St. Louis, MO, 1928-31; died July 10, 1988, age 84.

YOCON[®]

YOHIMBINE HCl

Description: Yohimbine is a 3a-15a-20B-17a-hydroxy Yohimbine-16a-carboxylic acid methyl ester. The alkaloid is found in Rubaceae and related trees. Also in Rauwolfia Serpentina (L) Benth. Yohimbine is an indolalkylamine alkaloid with chemical similarity to reserpine. It is a crystalline powder, odorless. Each compressed tablet contains (1/12 gr.) 5.4 mg of Yohimbine Hydrochloride.

Action: Yohimbine blocks presynaptic alpha-2 adrenergic receptors. Its action on peripheral blood vessels resembles that of reserpine, though it is weaker and of short duration. Yohimbine's peripheral autonomic nervous system effect is to increase parasympathetic (cholinergic) and decrease sympathetic (adrenergic) activity. It is to be noted that in male sexual performance, erection is linked to cholinergic activity and to alpha-2 adrenergic blockade which may theoretically result in increased penile inflow, decreased penile outflow or both.

Yohimbine exerts a stimulating action on the mood and may increase anxiety. Such actions have not been adequately studied or related to dosage although they appear to require high doses of the drug. Yohimbine has a mild anti-diuretic action, probably via stimulation of hypothalamic centers and release of posterior pituitary hormone.

Reportedly, Yohimbine exerts no significant influence on cardiac stimulation and other effects mediated by B-adrenergic receptors, its effect on blood pressure, if any, would be to lower it; however no adequate studies are at hand to quantitate this effect in terms of Yohimbine dosage.

Indications: Yocon[®] is indicated as a sympatholytic and mydriatic. It may have activity as an aphrodisiac.

Contraindications: Renal diseases, and patient's sensitive to the drug. In view of the limited and inadequate information at hand, no precise tabulation can be offered of additional contraindications.

Warning: Generally, this drug is not proposed for use in females and certainly must not be used during pregnancy. Neither is this drug proposed for use in pediatric, geriatric or cardio-renal patients with gastric or duodenal ulcer history. Nor should it be used in conjunction with mood-modifying drugs such as antidepressants, or in psychiatric patients in general.

Adverse Reactions: Yohimbine readily penetrates the (CNS) and produces a complex pattern of responses in lower doses than required to produce peripheral a-adrenergic blockade. These include, anti-diuresis, a general picture of central excitation including elevation of blood pressure and heart rate, increased motor activity, irritability and tremor. Sweating, nausea and vomiting are common after parenteral administration of the drug.^{1,2} Also dizziness, headache, skin flushing reported when used orally.^{1,3}

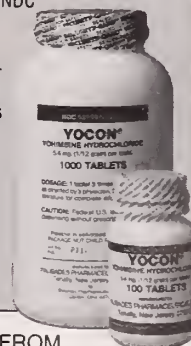
Dosage and Administration: Experimental dosage reported in treatment of erectile impotence.^{1,3,4} 1 tablet (5.4 mg) 3 times a day, to adult males taken orally. Occasional side effects reported with this dosage are nausea, dizziness or nervousness. In the event of side effects dosage to be reduced to 1/2 tablet 3 times a day, followed by gradual increases to 1 tablet 3 times a day. Reported therapy not more than 10 weeks.³

How Supplied: Oral tablets of Yocon[®] 1/12 gr. 5.4 mg in bottles of 100's NDC 53159-001-01 and 1000's NDC 53159-001-10.

References:

1. A. Morales et al., New England Journal of Medicine: 1221. November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

Rev. 1/85



AVAILABLE EXCLUSIVELY FROM
**PALISADES
PHARMACEUTICALS, INC.**
219 County Road
Tenafly, New Jersey 07670
(201) 569-8502
Outside NJ 1-800-237-9083

Toxic Waste Dump.



This November 17, dump cigarettes for the day.
You may even decide to quit for life.

EVERY QUITTER IS A WINNER.

The Great American Smokeout. Nov. 17.

AMERICAN
CANCER
SOCIETY

PLACEMENT SERVICE

PHYSICIANS AVAILABLE

PHYSICIAN COMPLETING RESIDENCY in obstetrics and gynecology seeks practice opportunity in Mississippi. Available July 1989. Contact Greg Patton, M.D., 2325 Glenmary Avenue #2, Louisville, KY 40204.

EXPERIENCED PHYSICIAN, seeking licensure, wants position as assistant, Location flexible. P.O. Box 225, Bay Springs, MS 39422.

PHYSICIAN completing residency in general surgery, and spouse (board-eligible pediatrician) seek practice opportunities in Mississippi. Location flexible. Contact Dinesh Ranjans, M.D., 2118 Chantilla Rd., Catonsville, Md 21228.

NATIVE MISSISSIPPIAN seeking practice opportunity in Ob-Gyn. Will complete residency and be available in July 1989. Contact Walter Wolfe, M.D. 722 West Austin Dr., Peoria, IL 61614; (309) 655-2000.

PHYSICIAN completing residency in psychiatry seeks practice opportunity in Mississippi. Available July 1989. Contact DeBora Murphy, M.D., P.O. Box 53, Vahalla, NY 10595 or call (914) 592-2710.

PHYSICIANS WANTED

EMERGENCY PHYSICIANS WANTED. Part-time and full-time positions in northeast Mississippi. Call (601) 328-8385.

PEDIATRICIANS. Private practice opportunities for two pediatricians in Mississippi Delta. Fully equipped 260-bed hospital. Call 601-459-2604.



**We earn
your trust every day.™**



Trustmark™
National Bank

Jackson/Bogue Chitto/Brookhaven/Canton/Clinton/Columbia
Georgetown/Gloster/Greenville/Greenwood/Hattiesburg/Hazlehurst
Leland/Liberty/Madison/Magee/McComb/Pearl/Petal/Ridgeland
Tylertown/Wesson

Member FDIC

DOCTOR'S EXECUTIVE SET SPECIAL

**500 Business Cards
500 Appointment Cards
500 Envelopes / 500 Letterheads**

All printed on quality white paper with
black ink (Includes minimum typesetting) **\$79⁹⁹**

**1000
ENVELOPES**

#10 or
6¾ Regular White
24 lb. Envelopes

\$34⁹⁵

**1000
6¾ BLUE
RETURN
ENVELOPES**

\$29⁹⁵

Printed in Black Ink

Offer includes minimum typesetting / Window envelopes — Add 10%
All orders shipped U.P.S. or on our delivery trucks at no additional charge.

Steve Kowalski's

Northtowne Printers

3909 Northview Drive • Jackson, MS 39206

(601) 981-2675

PLACEMENT SERVICE/Continued

FAMILY PRACTICE — Join a group of seasoned peers who have been in the trenches and who want to control their practice of medicine rather than vice-versa. If you would like general medicine with the option of part-time E.R. work; if you want to reclaim your freedom, have more time for your family, and divorce yourself from all the problems associated with modern practice, i.e., exorbitant office overhead, personnel problems, tyrannosaurus-like medical record departments, phone Sandy McBrayer at 1-601-328-2525, (collect).

PHYSICIANS NEEDED in Mississippi and other southern states. All specialties needed for both rural and urban locations. Solo and multi-specialty practices available. For further information contact the Lewis Group, 1227 N. Valley Mills, Suite 200, Waco, TX 76710; phone (817) 776-4121.

OB-GYNS. Private practice opportunities for two Ob-Gyn specialists in Mississippi Delta. Fully equipped 260-bed hospital. Call 601-459-2604.

PHYSICIANS WANTED AND NEEDED: Family Practice, General Surgery, Internal Medicine, OB/GYN. Excellent living conditions, exceptional school system. Terms negotiable with community visit expenses, relocation expenses, office space, guarantee cash flow, interest free line of credit for 12 to 18 months, etc. Other opportunities available. Call or write Richard Manning, Administrator, Tyler Holmes Memorial Hospital, Tyler Holmes Drive, Winona, MS 38967, (601) 283-4114.

INTERNIST needed to fill vacancy. Association with well-established internist who has excellent practice. Financial package available. One of the top industrial growth areas in Mississippi. Contact: Grenada Lake Medical Center, Grenada, MS 38901; (601) 226-8111, Paul J. Wood, chief executive director.

A Commitment to Excellence in Health Care

Mississippi Emergency Association, P.A. (MEA) a physician-owned and managed group has created an environment for physicians that promotes the ideals of private practice while freeing doctors from the administrative and financial demands of the private practitioner.

Board certified or board eligible physicians in the area of Emergency Medicine, Internal Medicine, and Family Medicine are presented a variety of professional and personal rewards, including excellent salaries, benefits, and advancement opportunities.

MEA is a dynamic, growing corporation that delivers quality health care. If you would like to know what career opportunities we can offer you, send your curriculum vitae to Sheila M. Stringer or call (601) 366-6503.

**Mississippi Emergency
Association, P.A.
P.O. Box 12917
Jackson, MS 39236-2917**

PSYCHIATRIST NEEDED

The Mississippi Department of Corrections is seeking to acquire the services of a Licensed Psychiatrist to work in the correctional system. The psychiatrist would be required to provide and supervise treatment for a population of chronically mentally ill offenders. Consultations with other physicians and psychological staff would occur primarily at the Mississippi Department of Corrections Hospital. Duties of the position also require psychiatrist to conduct psychiatric evaluations of sex offenders eligible for parole and perhaps to initiate in providing treatment services for this population as well. Salary is negotiable depending upon qualifications and experiences: *\$90,000 PLUS, forty-hour week, no call, and strong compensation package.* For additional information, contact W. E. Steiger, Administrator, Mississippi Department of Corrections Medical/Dental Facility, P.O. Box E, Parchman, MS 38738. Call (601) 745-6611 Ext. 631.

PHYSICIANS NEEDED

Physicians (especially specialists such as ophthalmologists, pediatricians, orthopedists, neurologists, etc.) interested in performing consultative evaluations (according to Social Security guidelines) should contact the Medical Relations Office. WATS 1-800-962-2230; Jackson, 922-6811; Martina Mayfield (ext. 2276) or Becky Ruggles (ext. 2300).



DISABILITY DETERMINATION SERVICES
1-800-962-2230

CLASSIFIED

1983 MIDMARK ALL ELECTRIC exam table. Good Condition. \$3,500.00. Call 601/268-5240.

MEDICAL OFFICE SPACE: 1000 sq. ft. office available August 1, 1988. In building with pediatric clinic in rapidly growing northwest Rankin County. Call 992-0110.

X-RAY MACHINE in excellent condition, medical supplies and equipment, waiting room furniture. Best offer. Call (601) 328-0830.

2V STAT STAT STAT STAT STAT STAT
Software and knowledge base for diagnoses and treatment, covering 69 different medical specialties; \$95 for demo disk. The more you know, the better you treat. The most updated medical algorithms at your fingertips! ! 2V MedTech Corporation, 2480 Windy Hill Road, Suite 201, Marietta, GA 33067. (404) 956-1855; Telex 55134/Medvideo.

Index to Advertisers

AMA Advisers	11	Palisades Pharmaceuticals	329
Avanti	323	Pennington's Shoes	317
		Premier Printing	319
Campbell Laboratories	328		
CancerPay Plus	4	Quality Health Resources	321
Central Miss. Amusements	311		
Disability Determination Services	13	Roche Laboratories	third, fourth covers
Harreld Chevy-Olds	6	Schoenfeld Co.	319
Eli Lilly and Co.	326B	Touro Infirmary	318
		Trustmark	331
Medical Assurance Co. of Miss.	second cover	U. S. Air Force	306
Miss. Department of Corrections	332	U. S. Army Reserve	8, 326A
Miss. Emergency Association	332	U. S. Naval Reserve	324
Miles Pharmaceuticals	6A, 6B		
MSMA Benefit Plan	326	Jon Wimbish	12
Northtowne Printers	331		

Who would say something nice about a bill collector?

Over 1,200 professional and trade associations, including yours.

It's true. The bill collecting services of I.C. System have been endorsed by over 1,200 associations around the country, including the one you belong to.

We're proud of these endorsements. We've made a concerted effort to bring high standards of professionalism, ethics, and effectiveness to the collection process. We believe we've succeeded and, apparently, your association agrees.

So if you've been billing people who aren't paying you, now you know who to contact.

Although we're headquartered in St. Paul, Minnesota, we have communication centers in every state of the union. We'll assign a local I.C. representative to your account who will be supported by a full range of collection services and

personnel, including carefully-trained telephone contact specialists. We'll even provide initial training on how to use our service for the person(s) in your office handling accounts receivable.

But most important, we *guarantee* results. Our fee structure combines a very competitive commission rate with a retainer (corporate or standard) scaled to your needs. And we guarantee to keep collecting for as long as it takes to recover *at least ten times the amount of that retainer*.

To find out how the I.C. System approach can work for you, call toll free (800) 824-9469, ext. 330. In Minnesota, call (612) 483-8201, ext. 330. Or return the coupon.



I want to recover the money that's owed me. Please provide me with information on the I.C. System approach.

3386

Name _____

Title _____

Firm _____

Address _____

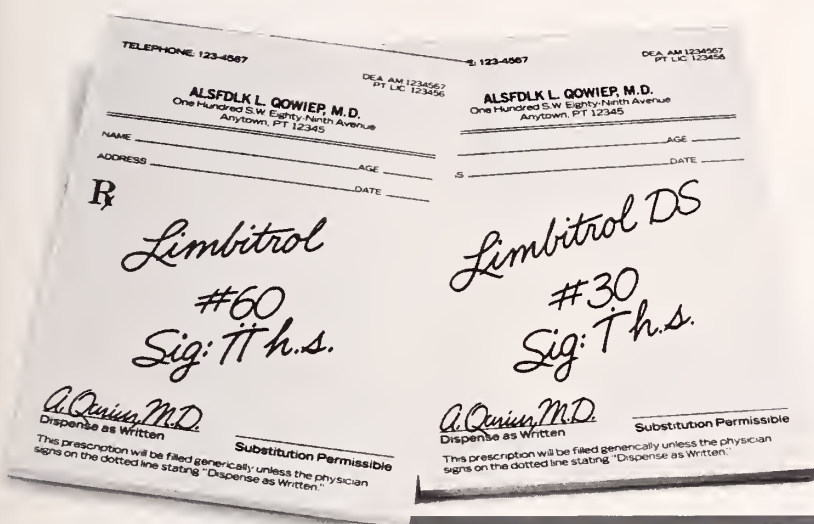
City _____ State _____ Zip _____

Telephone number _____

Mail to: I.C. System, Inc., 444 East Highway 96, P.O. Box 64639, St. Paul, Minnesota 55164-0639

In moderate depression and anxiety

- ➡ 74% of patients experienced improved sleep after the first *h.s.* dose¹
- ➡ First-week improvement in somatic symptoms¹
- ➡ 50% greater improvement with Limbitrol in the first week than with amitriptyline alone²



Protect Your Prescribing Decision:
Specify "Do not substitute."

Limbitrol®

Each tablet contains 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt) (V)

Limbitrol® DS

Each tablet contains 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt) (V)

References: 1. Data on file, Hoffmann-La Roche Inc., Nutley, NJ. 2. Feighner VP, et al: *Psychopharmacology* 61:217-225, Mar 22, 1979.

Limbitrol® (V)

Tranquillizer—Antidepressant

Before prescribing, please consult complete product information, a summary of which follows:

Contraindications: Known hypersensitivity to benzodiazepines or tricyclic antidepressants; concomitant use with MAOIs or within 14 days of monoamine oxidase inhibitors (then initiate cautiously, gradually increasing dosage until optimal response is achieved); during acute recovery phase following myocardial infarction.

Warnings: Use with caution in patients with history of urinary retention or angle-closure glaucoma. Severe constipation may occur when used with anticholinergics. Closely supervise cardiovascular patients. Arrhythmias, sinus tachycardia, prolongation of conduction time, myocardial infarction and stroke reported with tricyclic antidepressants, especially in high doses. Caution patients about possible combined effects with alcohol and other CNS depressants and against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving).

Usage in Pregnancy: Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations. Consider possibility of pregnancy when instituting therapy.

Withdrawal symptoms of the barbiturate type have occurred after discontinuation of benzodiazepines (see Drug Abuse and Dependence).

Precautions: Use cautiously in patients with a history of seizures, in hyperthyroid patients, those on thyroid medication, patients with impaired renal or hepatic function. Because of suicidal ideation in depressed patients, do not permit easy access to large quantities of drug. Periodic liver function tests and blood counts recommended during prolonged treatment. Amitriptyline may block action of guanethidine or similar antihypertensives. When tricyclic antidepressants are used concomitantly with cimetidine (Tagamet), clinically significant effects have been reported involving delayed elimination and increasing steady-state concentrations of the tricyclic drugs. Use of Limbitrol with other psychotropic drugs has not been evaluated; sedative effects may be additive. Discontinue several days before surgery. Limit concomitant administration of ECT to essential treatment. See Warnings for precautions about pregnancy. Should not be taken during the nursing period or by children under 12. In elderly and debilitated, limit to smallest effective dosage to preclude ataxia, oversedation, confusion or anticholinergic effects. Inform patients to consult physician before increasing dose or abruptly discontinuing this drug.

Adverse Reactions: Most frequent: drowsiness, dry mouth, constipation, blurred vision, dizziness, bloating. Less frequent: vivid dreams, impotence, tremor, confusion, nasal congestion. Rare: granulocytopenia, jaundice, hepatic dysfunction. Others: many symptoms associated with depression including anorexia, fatigue, weakness, restlessness, lethargy.

Adverse reactions not reported with Limbitrol but reported with one or both components or closely related drugs: **Cardiovascular:** Hypotension, hypertension, tachycardia, palpitations, myocardial infarction, arrhythmias, heart block, stroke. **Psychiatric:** Euphoria, apprehension, poor concentration, delusions, hallucinations, hypomania, increased or decreased libido. **Neurologic:** Incoordination, ataxia, numbness, tingling and paresthesias of the extremities, extrapyramidal symptoms, syncope, changes in EEG patterns. **Anticholinergic:** Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract. **Allergic:** Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus. **Hematologic:** Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia. **Gastrointestinal:** Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, black tongue. **Endocrine:** Testicular swelling, gynecomastia in the male, breast enlargement, galactorrhea and minor menstrual irregularities in the female, elevation and lowering of blood sugar levels, and syndrome of inappropriate ADH (antidiuretic hormone) secretion. **Other:** Headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, jaundice, alopecia, parotid swelling.

Drug Abuse and Dependence: Withdrawal symptoms similar to those noted with barbiturates and alcohol have occurred following abrupt discontinuance of chlordiazepoxide; more severe seen after excessive doses over extended periods; milder after taking continuously at therapeutic levels for several months. Withdrawal symptoms also reported with abrupt amitriptyline discontinuation. Therefore, after extended therapy, avoid abrupt discontinuation and taper dosage. Carefully supervise addiction-prone individuals because of predisposition to habituation and dependence.

Overdosage: Immediately hospitalize patient. Treat symptomatically and supportively. I.V. administration of 1 to 3 mg physostigmine salicylate may reverse symptoms of amitriptyline poisoning. See complete product information for manifestation and treatment.

How Supplied: Double strength (DS) Tablets, white, film-coated, each containing 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt), and Tablets, blue, film-coated, each containing 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt)—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 50.



ROCHE PRODUCTS INC.
Manati, Puerto Rico 00701

In the depressed and anxious patient

See Improvement In The First Week¹

And The Weeks That Follow

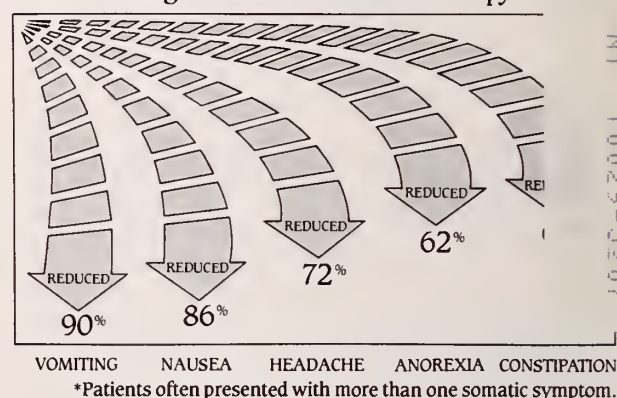
- 74% of patients experienced improved sleep after the first *h.s.* dose¹
- First-week reduction in somatic symptoms¹

Caution patients about the combined effects of Limbitrol with alcohol or other CNS depressants and about activities requiring complete mental alertness, such as operating machinery or driving a car. In general, limit dosage to the lowest effective amount in elderly patients.

Limbitrol[®]
Each tablet contains 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt) (N)

Limbitrol DS[®]
Each tablet contains 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt) (N)

Percentage of Reduction in Individual Somatic Symptoms During First Week of Limbitrol Therapy*



Copyright © 1988 by Roche Products Inc. All rights reserved.
Please see summary of product information inside back cover.

NEW YORK
OCT 25 1988
NEW YORK
SEE 103RD ST
NEW YORK
N.Y. ACADEMY OF MED
10029-5207

JOURNAL

OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION

NOVEMBER

1988



Obstetrical Manpower in Mississippi:
Where Are the Babies Being Born?

There is strength in numbers. (And our numbers are growing.)



Seated, Left to Right: Cheryl Maxwell (Claims Secretary), Lisa Noble (Underwriting Secretary), Maria Graham (Claims Secretary), Kim Ormond (Receptionist), Mike Houpt (General Manager), and C.G. "Tanny" Sutherland, M.D. (Medical Director)

Standing, Left to Right: C.R. "Bob" Montgomery (General Counsel), Lisa Stewart (Underwriting Secretary), Sharon Thompson (Claims Secretary), Craig Brown (Underwriting Manager), Joey Grimes (Controller), Chuck Dunn (Assistant General Manager), and Debbie Sutherland (Bookkeeper)

Since we wrote our first policy in November of 1977, we have grown to serve more physicians than any other medical liability insurance company in Mississippi.

Why do more physicians turn to Medical Assurance Company? Our staff has grown from two in 1978 to five in 1983 to twelve in 1988, and we have plans for additional staff even now. We have insurance professionals who can provide efficient and cost-effective

answers to your medical liability insurance questions. We serve more than 1800 Mississippi doctors – providing savings and financial strength through a program of sound investments and underwriting guidelines. Every claim is reviewed by a panel of medical and legal claims experts.

So call or come visit our staff at our offices on Riverside Drive. Let us show you *our* strength in numbers.



Medical Assurance Company of Mississippi

Street Address: Suite 301
735 Riverside Drive, Jackson, MS
Phone: (601) 353-2000

Mailing Address: P.O. Box 4915, Jackson, MS 39216-0915
MS WATS: 1-800-325-4172

JOURNAL

OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION

NOVEMBER 1988

VOLUME XXIX

NUMBER 11

SCIENTIFIC

- Obstetrical Manpower in Mississippi: Where Are the Babies Being Born?** 333

*F. M. Wiygul, M.D.,
H. T. Milhorn, Jr., M.D., and
J. G. Robbins, M.S.*

- Intraoperative Detection of Unilateral Spinal Cord Dysfunction by Somatosensory Evoked Potentials** 339

R. A. Ashley, B.S. and A. S. Wee, M.D.

- Continuous Autotransfusion after Coronary Bypass Surgery** 343

*David B. Stephens, M.D. and
Elizabeth Stephens, R.N.*

EDITORIALS

- AMA Membership Equals Dollars and Sense** 346

David R. Steckler, M.D.

- Reimbursement Proposals Require United Response** 347

Myron W. Locky, M.D.

DEPARTMENTS

- Medical Organization** 349

- Personals** 351

- New Members** 355

- Deaths** 359

- Postgraduate Calendar** 359

- Medico-Legal Brief** 361

- Placement Service** 362

EDITOR

Myron W. Locky, M.D.

EDITOR EMERITUS

W. Moncure Dabney, M.D.

ASSOCIATE EDITORS

George E. Abraham, M.D.

Joseph E. Johnston, M.D.

MANAGING EDITOR

Patsy Silver

PUBLICATIONS COMMITTEE

Richard C. Miller, M.D.,
Chairman

George H. Martin, M.D.

William J. Gibson, M.D.
and the editors

THE ASSOCIATION

David R. Steckler, M.D.
President

J. Ed Hill, M.D.

President-Elect

Don Q. Mitchell, M.D.

Secretary-Treasurer

James C. Waites, M.D.

Speaker

H. Vann Craig, M.D.

Vice Speaker

Charles L. Mathews

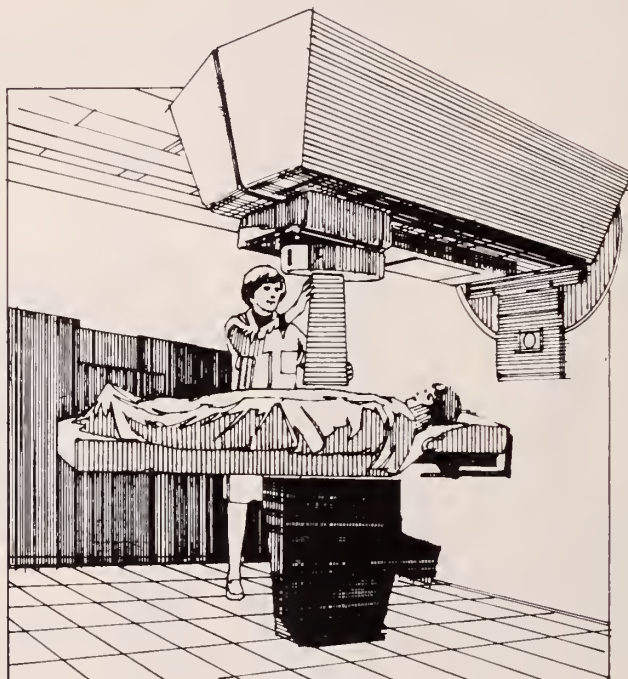
Executive Director

Copyright© 1988, Mississippi State Medical Association. The views expressed in this publication reflect the opinions of the authors and do not necessarily state the opinions or policies of the Mississippi State Medical Association.

THE JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION (ISSN 0026-6393) is owned and published monthly by the Mississippi State Medical Association, founded 1856, at 735 Riverside Drive, Jackson, Mississippi 39202. Subscription rate, \$25.00 per annum; \$35.00 per annum for foreign subscriptions; \$2.25 per copy, as available. Advertising rates furnished on request. Printed by The Ovid Bell Press, Inc., Fulton, Missouri. Second-class postage paid at Jackson, Mississippi, and at additional mailing offices. POSTMASTER: Send address changes to Mississippi State Medical Association, P.O. Box 5229, Jackson, Mississippi 39216.

Now available to Mississippi State Medical Association members, protection from one of America's leading diseases **CANCER.**

"CANCERPAY PLUS"



- "CancerPay Plus" is a quality cancer policy supplement to your present health insurance.
- Offered by the Mississippi State Medical Association, "CancerPay Plus" provides excellent benefits to physician members of MSMA, their employees and families.
- Reduced rates through Association affiliation
- Payroll deducted with groups as small as one participant.
- Pays in addition to all other insurance, including Medicare.
- Intensive Care and Dread Disease riders available.

For Complete Details of Plan Call or Write:

Scott Shappley

MISSISSIPPI STATE MEDICAL ASSOCIATION

P.O. Box 55509

Jackson, MS 39216

(601) 354-5433 — Watts 1-800-682-6415

NEWSLETTER

November 1988

Dear Doctor:

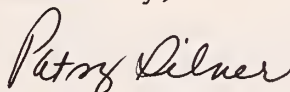
Physicians now are permitted to apply for the AMA's Physician Recognition Award (PRA) for periods valid for one, two or three years. The PRA certificates previously were issued for three years, but procedures have been changed to allow physicians to use PRA reporting in connection with CME requirements of other organizations, many of which are for time periods other than three years.

Physicians now may apply for the PRA according to the following schedule: for one year validation, 50 CME hours, of which 20 must be Category I; for two years, 100 CME hours including 40 of Category I; and for three year validation, 150 hours of CME including 60 of Category I. Application fees remain the same.

Representatives of hospital medical staffs are invited to attend the AMA Hospital Medical Staff Section's Twelfth Assembly to be held December 1-5 in Dallas. The HMSS Assembly meeting has become a major national forum for debating hospital medical staff issues. It also provides medical staffs with the opportunity to participate in the policymaking process of the AMA. For information, please call (312) 645-4754.

The St. Paul Insurance Company has announced it will seek its lowest average countrywide rate increase for medical liability coverage in five years. Effective July 1, 1989, the average countrywide rate increase will be 5.5%. This compares to premium rate increases averaging 30% one year ago. Policyholders in 8 of the 42 states where St. Paul writes coverage will experience decreases in premiums. Cited as a leading factor contributing to the change is a decline in frequency of claims - 15.4 claims per 100 doctors in 1987 compared to 17 claims per 100 doctors in 1986.

Sincerely,



Patsy Silver
Managing Editor



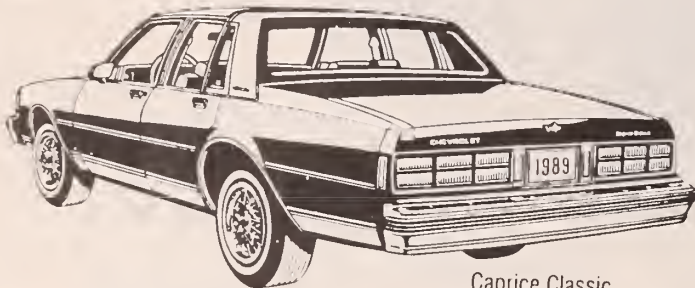
Thank
You

Doctor,

Have you ever looked for a different way to say "Thank You," "Congratulations," or "Get Well Soon"?

All of these messages are available, along with memorial tributes, in greeting cards from the MSMA Auxiliary. Each card signifies your donation to the AMA-ERF in the name of a friend or colleague.

For information about AMA-ERF greeting cards for year-round use, contact a member of your local MSMA Auxiliary, or Kathy Carmichael, 106 Colonial Place, Hattiesburg, MS 39401; telephone 268-9642.



Caprice Classic
Brougham LS Sedan

FROM . . .
CLASS!

TO . . .

FAST



Camaro IROC-Z

THE
Heartbeat

OF AMERICA  TODAY'S CHEVROLET™

HARRELD CHEVY-OLDS

CALL TOLL-FREE!

JACKSON
354-2233

1-800-451-3908

CANTON
859-1611

A Little Behind In Managing Your Finances?



AMA Advisers MONEY MASTER Account...

Even if you're pretty much on top of your personal or business money management duties, there's an easier way to handle it all that can save hours of your precious free time. It's the **AMA Advisers Money Master Account**, a state-of-the-art financial management system for managing your assets, investments, savings, expenses — even your insurance! With **Money Master**, you'll discover how easy personal finance can be.

AMA Advisers Money Master Account simplifies financial management with:

- **Your Own Budget Analysis...** through the use of coded checks you'll see your monthly expenses sorted and totaled into one of 37 pre-set categories such as insurance premiums, charitable contributions, education, utilities, vacation and many more. Great for personal or professional budgeting!
- **Discount Brokerage Services...** that enable you to trade stocks, bonds, government securities, options and of course, mutual funds.
- **One Monthly Statement for ALL Your Investments.** In addition to investments made through your **AMA Advisers Money Master Account**, simply supply us with the appropriate information and for your convenience, we'll track your investments, even those made through other brokers or mutual fund organizations. All that you tell us about will be shown on your **Money Master Account** statement.

Building Mutual Trust



AMA ADVISERS, INC.

AMA Advisers, Inc. is a subsidiary of the American Medical Association and manages the mutual funds in The AMA Group.

Services and products as described herein are not offered for sale in any state where they are not lawfully registered.

• **Special Year-End Statement Practically Completes Your Tax Return For You!** At year end, you'll receive a statement so complete that it even shows the proper tax schedule to use for filing your return! All you do is transfer the information to the form.

• **High Money Market Returns On Your Checking Account!** You earn money market rates on all the money in your account until the day your check clears, since an AMA Money Fund Account is opened through the **Money Master Account**.

If you would like convenience of a **Money Master Account**,

CALL TOLL FREE: 1-800-AMA-FUND
Ext. 2338 TODAY! (262-3863)

Or, complete and mail the coupon. You'll receive a complete **Money Master Account** Information Kit with an application to open the one account for all your investment needs. An AMA Money Fund prospectus will be included for complete details on fees and expenses relating to the fund. Please read the prospectus carefully before you invest or send money.

MS 2338

MAIL TO: AMA ADVISERS, INC.,
P.O. BOX 1923, WEST CHESTER, PA 19380-1923

☐ **Yes! Send me a FREE AMA Advisers Money Master Account Information Kit.**

NAME

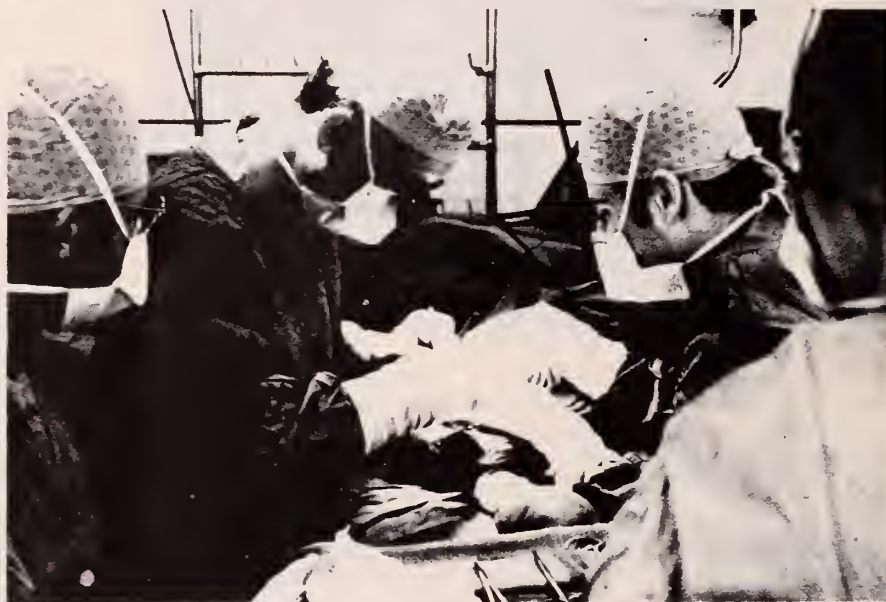
ADDRESS

CITY

STATE ZIP CODE

PHONE # () Day ☐ Evening ☐
Area Code

THE ARMY RESERVE OFFERS NEW FINANCIAL INCENTIVES FOR RESIDENTS.



If you are a resident in Anesthesiology or Surgery*, the Army Reserve has a new and exciting opportunity for you. The new Specialized Training Assistance Program will provide you with financial incentives while you're training in one of these specialties.

Here's how the program can work for you. If you qualify, you may be selected to participate in the Specialized Training Program. You'll serve in a local Army Reserve medical unit with flexible scheduling so it won't interfere with your residency

training, and in addition to your regular monthly Reserve pay, you'll receive a stipend of \$678 a month.

You'll also have the opportunity to practice your specialty for two weeks a year at one of the Army's prestigious Medical Centers.

Find out more about the Army Reserve's new Specialized Training Assistance Program.

Call or write your US Army Medical Department Reserve Personnel Counselor:

**ARMY RESERVE MEDICINE
2100 16th AVE. SOUTH
SUITE 303
BIRMINGHAM, AL 35205
(205) 930-9719 COLLECT**

* General, Orthopaedic, Neuro, Colon/Rectal, Cardio/Thoracic, Pediatric, Peripheral/Vascular, or Plastic Surgery.

ARMY RESERVE MEDICINE. BE ALL YOU CAN BE.

DATELINE

"Law for Physicians"
Is Seminar Topic

Jackson, MS - The Mississippi Defense Lawyers Association is sponsoring a seminar for physicians on December 2-3 at Jackson's Coliseum Ramada Inn. The seminar, "Law for Physicians," is part of a joint effort with UMC under which the organizations alternate sponsorship of annual seminars. In addition to malpractice issues, topics include medical/legal issues surrounding AIDS, recent tax reform changes, and tort reform.

Nominations Solicited
For Community Service Award

Jackson, MS - MSMA's component societies are invited to submit nominations for the 1989 MSMA Community Service Award. The award is presented for outstanding civic service by a physician, and it consists of a commemorative plaque and a \$500 contribution to a charity or civic organization designated by the award winner. The award will be presented at the 121st Annual Session. Nomination deadline is February 15.

Committee Studies Medical
Examiner's Office Needs

Jackson, MS - Mississippi needs more people and better equipment in the State Medical Examiner's office, according to a report by the Legislature's Performance Evaluation and Expenditure Review (PEER) committee. The report recommends the addition of 19 new employees and a forensic morgue facility. The Medical Examiner post has been vacant since September 1986, and recruitment efforts are underway.

Physicians Needed in
Military Reserves

Washington, DC - Although some 11,000 physicians currently serve in the military reserves, there is a shortage of nearly 6,000 physicians, most of which are in the specialties of surgery, orthopaedics and anesthesiology. The Defense Department is recruiting physicians now, and offers flexible schedules, retirement benefits, and foreign travel. For information call (202) 696-6866, collect.

Health Department
Reports AIDS Totals

Jackson, MS - Of the 209 cases of AIDS reported in Mississippi, 120 patients have died, says a report from the State Health Department. Fifty-eight cases have been reported thus far in 1988. Of the state's total, 4 have occurred in children 12 years old or younger; 186 (or 89%) have been male; six percent were determined to be heterosexually transmitted.

THE LOWER RESPIRATORY TRACT— More vulnerable to infection in smokers and older adults



Experience counts

Ceclor[®] Pulvules[®]
250 mg
cefaclor
think of it first

For respiratory tract infections due to susceptible strains of indicated organisms.

Summary.
Consult the package literature for prescribing information.

Indication: Lower respiratory infections, including pneumonia, caused by *Streptococcus pneumoniae*, *Haemophilus influenzae*, and *Streptococcus pyogenes* (group A β -hemolytic streptococci).

Contraindication: Known allergy to cephalosporins

Warnings: CECLOR SHOULD BE ADMINISTERED CAUTIOUSLY TO PENICILLIN SENSITIVE PATIENTS. PENICILLINS AND CEPHALOSPORINS SHOW PARTIAL CROSS ALLERGENICITY POSSIBLE REACTIONS INCLUDE ANAPHYLAXIS

Administer cautiously to allergic patients.
Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics. It must be considered in differential diagnosis of antibiotic-associated diarrhea. Colon flora is altered by broad-spectrum antibiotic treatment, possibly resulting in antibiotic-associated colitis.

Precautions:

- Discontinue Ceclor in the event of allergic reactions to it
- Prolonged use may result in overgrowth of nonsusceptible organisms
- Positive direct Coombs' tests have been reported during treatment with cephalosporins
- Ceclor should be administered with caution in the presence of markedly impaired renal function. Although dosage adjustments in

moderate to severe renal impairment are usually not required, careful clinical observation and laboratory studies should be made.

- Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis
- Safety and effectiveness have not been determined in pregnancy, lactation, and infants less than one month old. Ceclor penetrates mother's milk. Exercise caution in prescribing for these patients

Adverse Reactions: (percentage of patients)
Therapy-related adverse reactions are uncommon. Those reported include:

- Gastrointestinal (mostly diarrhea): 2.5%
- Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment
- Hypersensitivity reactions (including morbilliform eruptions, pruritus, urticaria, and serum-sickness-like reactions that have included erythema multiforme [rarely, Stevens-Johnson syndrome] and toxic epidermal necrolysis or the above skin manifestations accompanied by arthritis/arthritis, and frequently, fever): 1.5%, usually subside within a few days after cessation of therapy. Serum-sickness-like reactions have been reported more frequently in children than in adults and have usually occurred during or following a second course of therapy with Ceclor. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome

- Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy
- As with some penicillins and some other cephalosporins, transient hepatitis and cholestatic jaundice have been reported rarely
- Rarely, reversible hyperactivity, nervousness, insomnia, confusion, hypotonia, dizziness, and somnolence have been reported
- Other: eosinophilia, 2%, genital pruritus or vaginitis, less than 1%, and, rarely, thrombocytopenia.

Abnormalities in laboratory results of uncertain etiology

- Slight elevations in hepatic enzymes
- Transient fluctuations in leukocyte count (especially in infants and children)
- Abnormal urinalysis, elevations in BUN or serum creatinine
- Positive direct Coombs' test
- False-positive tests for urinary glucose with Benedict's or Fehling's solution and Clinistest[®] tablets but not with Tes-Tape[®] (glucose enzymatic test strip, Lilly)

Additional information available from
Eli Lilly and Company, Indianapolis, Indiana 46285



Eli Lilly Industries, Inc.
Carolina, Puerto Rico 00630

ORIGINAL PAPERS

Obstetrical Manpower in Mississippi: Where Are the Babies Being Born?

F. M. WIYGUL, M.D.

H. T. MILHORN, Jr., M.D., Ph.D.

J. G. ROBBINS, M.S.

Jackson, Mississippi

THIS IS THE third in a series of studies on primary health care delivery in Mississippi. The first study examined the distribution of primary care physicians in the state.¹ It looked at the loss of physicians in rural areas and made a projection of future needs. The second study examined the loss of obstetrical manpower over the past five years and estimated its reduction in the next five years.² It provided an estimate of the number of physicians needed to fill these vacancies. The present study examines the demographics of obstetrical deliveries in the state at three levels: hospitals, counties and Mississippi State Department of Health districts. In conducting this series of studies, we hope to provide a data base which will be useful for health planning and, especially, in planning for future health manpower needs. Our surveys have indicated that health care delivery demographics are changing rapidly. As a result, we plan to repeat these surveys at periodic intervals.

Methods

The material presented in this study is derived from the most recent data available from the Mississippi State Department of Health,³ personal communications,⁴ and information from the Mississippi

This paper, the third in a series designed to provide data on the health delivery system in Mississippi, is a descriptive study of the distribution of obstetrical services in the state. It examines the distribution and size of delivery services by hospital, county and public health planning district. The data indicate that centralization of these services is proceeding at a rapid rate, with obstetrical deliveries being concentrated in a few large hospitals and with smaller community hospitals rapidly closing their services. The authors examine the implications for health planning and for the regionalization of perinatal services in the state.

Research and Development Center.⁵ The data are for the year 1986. They were organized in a form that could be analyzed for health care delivery planning.

Results

Figure 1 shows the numerical distribution of hospitals by size of their delivery services. Ninety-five hospitals reported at least one delivery (only 86 hospitals considered themselves to have obstetrical

From the Department of Family Medicine, University of Mississippi School of Medicine, Jackson, MS.

OBSTETRICAL MANPOWER/Continued

services in 1986). Seventy-two percent of the state's hospitals which reported deliveries (68) delivered less than 500 babies each, representing only 19.34 percent of total deliveries. Two hospitals which delivered more than 2500 babies per year nearly equaled this (17.42%). One of these is the University Medical Center.

The hospitals with the largest delivery services (over 1000 per year) are listed in Table 1. These eleven hospitals delivered 51.44 percent of the state's babies. Only State Department of Health Districts III and VI do not contain one of these hospitals. District VI, however, does have two hospitals with greater than 800 deliveries a year (Matty Hersee and Jeff Anderson Hospital). The University Hospital, by far, had the largest number of deliveries (4,640), amounting to 11.29 percent of the total. Three hospitals in District V (University Hospital, Mississippi Baptist Medical Center and Woman's Hospital) delivered 20.45 percent of the total babies.

Fourteen counties reported over a thousand deliveries each, accounting for 72.91 percent of all deliveries state-wide (see Table 2). Hinds County, primarily because of the presence of the University Hospital and Mississippi Baptist Medical Center, reported the most deliveries (7,359), representing 17.91 percent of the total. Three adjacent counties in District V (Hinds, Rankin, Warren) delivered 24.95 percent of the state's babies. The indices shown in this table indicate whether prospective mothers came into a county or left it to give birth.

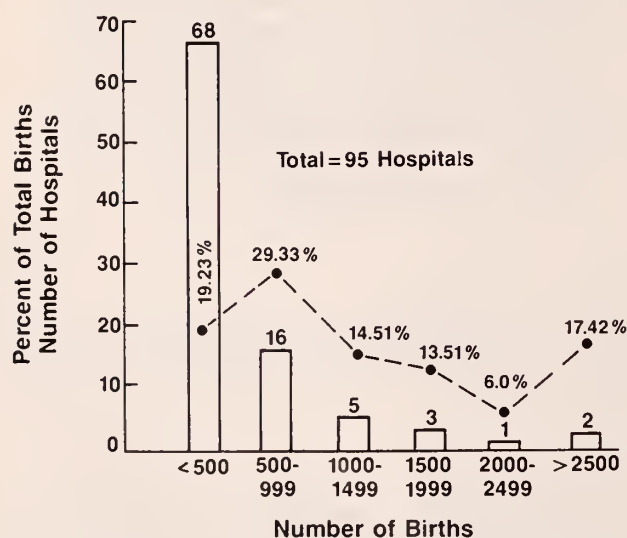


Figure 1. Number of hospitals (bar graph) and percent of total births (dashed line) per hospital delivery service size

TABLE 1
HOSPITALS WITH OVER 1000 DELIVERIES

Hospital	Number of Births	Percent	Region
University Hosp. (Jackson)	4,640	11.29	V
North Miss. Med. Center (Tupelo)	2,516	6.12	II
Forrest General Hospital (Hattiesburg)	2,466	6.0	VIII
Miss. Baptist Med. Center (Jackson)	1,972	4.80	V
Memorial Hosp. (Gulfport)	1,790	4.36	IX
Woman's Hosp. (Flowood)	1,790	4.36	V
Southwest Reg. Hosp. (McComb)	1,329	3.23	VII
Singing River Hosp. (Pascagoula)	1,262	3.07	IX
Northwest Reg. Hosp. (Clarksdale)	1,223	2.98	I
Keesler AFB (Biloxi)	1,145	2.79	IX
Gilmore Memorial Hosp. (Amory)	1,002	2.44	IV
Total	21,135	51.44	

An index of 1.0 means that the number of deliveries was matched to the population. An index greater than one means that the county delivered more than its share of babies and an index of less than 1.0 means that the number of deliveries was less than expected for the population. As can be seen, of the 14 counties, only one had an index less than 1.0 (Jackson). The county with the largest index was Lee (2.60), primarily because of North Mississippi Medical Center in Tupelo. Several other counties were not far behind (Forrest, 2.30; Pike, 2.27; Coahoma, 2.20).

Table 3 shows the births by State Department of Health Districts. District V heads the list with 11,037 deliveries, representing 26.86 percent of the births. Using the indices described earlier, District III, IV, VII and IX are close to being ideal in terms of births for their population, having indexes of 0.99, 0.99, 0.94, and 0.96, respectively. District V, with an index of 1.30 is the major District on the plus side. On the other hand, District VI shows an index of only 0.69, indicating it to be under-served in the obstetrical area.

Much of the data from the study is summarized in Figure 2. The number of deliveries in each county is indicated on the map. Thirty counties had less than 50 deliveries each, with 14 counties reporting no deliveries at all. On the other hand, 14 counties had over 1000 births each. The map also shows the State Department of Health planning Districts with

their number in the periphery of the map and the number of deliveries for each given beneath the District number.

Discussion

It appears that de facto regionalization is taking place in Mississippi, with obstetrical deliveries being concentrated mainly in a few large areas. In 1986, only 14 of Mississippi's 82 counties reported over a thousand deliveries each. On the other hand, 30 counties reported less than 50 deliveries each with at least 14 counties reporting no deliveries at all. Thus, the state subdivides into a few areas, mostly centered around the larger towns and rural areas at

varying distances from major medical services. It is also apparent that there is variation in how well the individual large perinatal centers serve their areas in terms of percent of the resident population served. Some women are required to travel more than 30 miles to obtain services. (Thirty miles is used by the Department of Health and Human Services for the maximum distance to travel in its guideline for community health clinics.) Whether the benefits of the availability of a technically higher level of care in larger centers is offset by the disadvantage of having to travel long distances for prenatal care and delivery and the loss of closeness to the home community remains to be seen.

TABLE 2
COUNTIES WITH OVER 1000 DELIVERIES

<i>County</i>	<i>Number of Births</i>	<i>Percent of Births</i>	<i>County Population</i>	<i>Percent of Population</i>	<i>Index</i>	<i>Region</i>
Hinds	7,359	17.91	259,754	9.90	1.80	V
Harrison	3,666	8.92	172,465	6.60	1.35	IX
Lee	2,516	6.12	62,023	2.36	2.60	II
Forrest	2,466	6.0	68,226	2.60	2.30	VIII
Lauderdale	2,142	5.21	77,493	2.95	1.80	VI
Rankin	1,790	4.36	82,076	3.13	1.40	V
Jackson	1,611	3.92	128,111	4.90	.80	IX
Washington	1,370	3.33	70,671	2.69	1.53	III
Pike	1,329	3.23	37,439	1.43	2.27	VII
Jones	1,302	3.17	62,979	2.40	1.30	VIII
Coahoma	1,223	2.98	35,544	1.35	2.20	I
Warren	1,101	2.68	51,410	1.96	1.12	V
Lowndes	1,082	2.63	60,151	2.24	1.15	IV
Monroe	<u>1,005</u>	<u>2.45</u>	<u>36,663</u>	<u>1.40</u>	1.75	IV
Total	29,962	72.91	1,205,005	45.91		

TABLE 3
DELIVERIES BY BOARD OF HEALTH REGIONS

<i>Region</i>	<i>Number of Births</i>	<i>Percent of Total</i>	<i>Region Population</i>	<i>Percent of Population</i>	<i>Index</i>
I	2,696	6.56	221,647	8.44	0.78
II	3,952	9.62	293,161	11.17	0.86
III	4,178	10.17	271,021	10.32	0.99
IV	3,757	9.14	240,198	9.15	0.99
V	11,037	26.86	543,118	20.69	1.30
VI	2,453	5.97	226,300	8.62	0.69
VII	2,587	6.30	175,426	6.68	0.94
VIII	4,435	10.79	256,043	9.76	1.11
IX	<u>5,992</u>	<u>14.59</u>	<u>398,040</u>	<u>15.17</u>	0.96
Total	41,087	100.00	2,624,954	100.00	1.00

OBSTETRICAL MANPOWER/Continued

There is still a large number of small hospitals maintaining delivery services. However, many have closed their services for a variety of reasons, including loss of physician manpower in rural areas and the relinquishment of obstetrical practice by most family and general practitioners. The Mississippi State Department of Health reports that the number of hospitals offering obstetrical services has decreased from 86 in 1986 to 62 in 1988. In 1986, 11 hospitals reported more than 1000 deliveries per year. These are reasonably well distributed over the state. Districts III and VI, which are located in the central delta and Meridian area, respectively, are without one of these hospitals. Both areas, however, do contain several hospitals that had deliveries of over 500 births per year each.

Another aspect of obstetrical service availability is the large number of women who look to public institutions for prenatal care and delivery. The State Department of Health reported that 17,290 patients (or around 40% of all births) received prenatal care in public health department clinics in 1986. Many more patients are now eligible for Medicaid funding under regulations adopted last year by the Legislature but are dependent upon physicians and hospitals that will provide the service. In 1986, 16 percent of all deliveries in the state were done in the charity hospitals and The University Medical Center. The three state charity hospitals at Laurel, Meridian, and Vicksburg accounted for 2170 of these deliveries. Geographically, these are all located in the south central part of the state. It is easy to see that elimination of these facilities without making other arrangements in the central area of the state would create a serious problem for other hospitals; especially for the University of Mississippi Medical Center, whose obstetrical case load is almost twice what it was designed for.

The Mississippi State Department of Health has developed a comprehensive plan for improving the health of mothers and infants through implementing various elements of the perinatal health care system. One of the major features of this plan is regionalization of perinatal care, with secondary and tertiary care centers for high risk cases. Informal regionalization of hospital maternity services for both normal and high risk cases has already occurred in much of the state. Many of the smaller hospitals, and some large ones, have discontinued maternity services, raising the question of how regionalization as presently conceived can work without a network

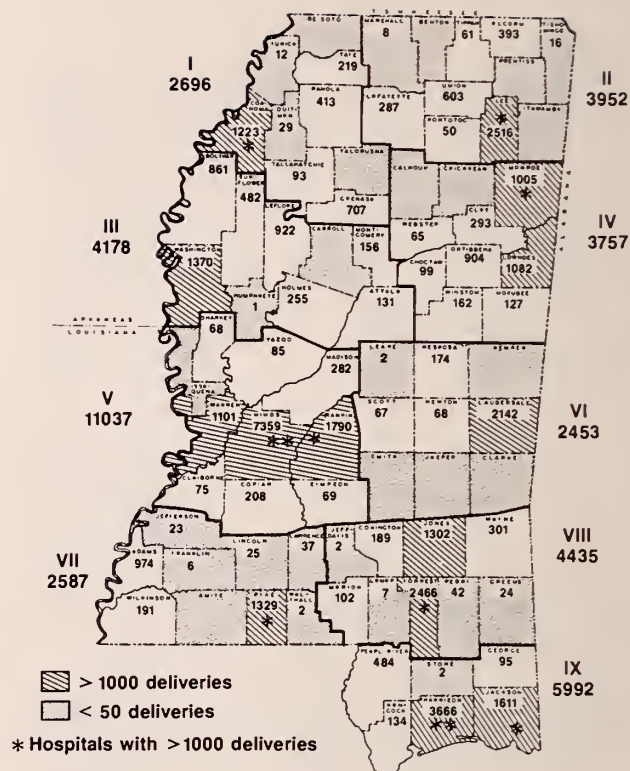


Figure 2. Composite delivery data

of Level 1 hospitals to furnish services for uncomplicated or non-high-risk patients.

This centralization of maternity services has proceeded at a rapid rate and appears to be accelerating, with more and more small hospitals dropping out of the scene. The implications that this has for orderly regionalization of maternity services needs to be examined carefully by health planners and decision makers who will be responsible for implementing regionalization of perinatal services. While it is obvious that community hospitals should be maintained, several questions arise. Do community hospitals need to have maternity services? How far is too far for maternity patients to travel for prenatal care and delivery? At what point will the problems that arise from women in labor being required to make automobile trips further than 30 miles to a hospital start to offset the effects of better staffed and more efficient maternity services that should follow centralization? What will be the cost differential between delivering in a community facility and in a regional center? The effect on regional

hospitals of having to accept a larger part of the State Department of Health's maternity case load must also be considered. The University Medical Center especially will be affected if the state charity hospitals were to be phased out as has been discussed for several years. If this comes about the University Medical Center must be given adequate facilities for the increased patient load.

The authors believe that effective regionalization of maternity services cannot be achieved without preservation of community hospital maternity services as Level 1 centers. Health planners and decision makers should include: (1) support for a maintenance of effective maternity services close to the population in community hospitals; (2) provision for the Level II centers to be able to accept the State

Department of Health's high risk case load and to provide access to service in all areas; and (3) provision for construction of an adequate Level III center at the University Medical Center. ★★

2500 North State Street (39216)

References

1. Wiygul, F.M. and Gillis, W.R. Primary Care Physicians in Mississippi. J. Miss. State Med. Assoc., Pp 67-69, March, 1984.
2. Wiygul, F.M., Gillis, W.R. and Milhorn, H.T., Jr. Obstetrical Manpower in Mississippi: Who will deliver the babies. J. Miss. State Med. Assoc. Pp 5-7, January, 1987.
3. Mississippi Board of Health. 1986 Live births delivered in Mississippi by facility where delivery occurred by place of residence of mother and race of mother.
4. Personal Communication. Mississippi State Board of Health.
5. Mississippi Research & Development Center. 1986 Census Data.

DOCTOR'S EXECUTIVE SET SPECIAL

500 Business Cards

500 Appointment Cards

500 Envelopes / 500 Letterheads

All printed on quality white paper with
black ink (Includes minimum typesetting) **\$79⁹⁹**

**1000
ENVELOPES**

#10 or
6¾ Regular White
24 lb. Envelopes

\$34⁹⁵

**1000
6¾ BLUE
RETURN
ENVELOPES**

\$29⁹⁵

Printed In Black Ink

Offer includes minimum typesetting / Window envelopes — Add 10%

All orders shipped U.P.S. or on our delivery trucks at no additional charge.

Steve Kowalski's

Northtowne Printers

3909 Northview Drive • Jackson, MS 39206

(601) 981-2675



“When I realized my chances of becoming disabled by age 65 were *three times greater* than the chances of death . . .

I compared disability insurance plans. And I decided that my MSMA-endorsed disability insurance plan

SERVES ME BEST!

It's not group insurance, but an individually-owned policy which is *non-cancellable* and *guaranteed renewable*.”

If you're a member of the Mississippi State Medical Association you may be eligible for this outstanding professional disability plan at *discounted premiums*.

- Non-cancellable, guaranteed renewable
- Medical specialty protection
- Presumptive loss provision
- Indexing of prior earnings
- Waiver of premium
- Cost of living rider
- Future disability insurance option
- Lifetime accident and sickness rider
- Total and residual disability protection

Offered by Paul Revere Insurance Company to MSMA members through its exclusive representatives, Professional Disability Specialists.

Jon B. Wimbish, Disability Specialist

1501 Lakeland Drive, Suite 200 Jackson, MS 39216 Telephone 362-9800

Intraoperative Detection of Unilateral Spinal Cord Dysfunction by Somatosensory Evoked Potentials

R. A. ASHLEY, B.S.

A. S. WEE, M.D.

Jackson, Mississippi

THE 1975 REPORT of the Scoliosis Research Society brought increased attention to the risk of spinal cord damage during surgical correction of scoliosis. The incidences of postoperative paraplegia and paraparesis were 0.5% and 1.79%, respectively.¹ In order to minimize or avoid such neurologic sequelae, a reliable means of monitoring spinal cord function during surgery became necessary.

In 1977, Nash *et al*² reported the routine use of cortical somatosensory evoked potentials (SEPs) to examine spinal cord activity during scoliosis surgery. Consequently, both spinal and cortical SEPs have been utilized to monitor cord function, particularly during spinal fusion using Harrington rods or Luge wires.

SEPs primarily reflect dorsal column activity (sensory), and do not directly assess anterior cord function (motor). In practical applications, however, insults to the spinal cord are well reflected in SEP recordings.³

Background and General Considerations

During electrical stimulation of a peripheral nerve, the response of the sensory structures to the stimulus can be recorded. Abnormalities implicating the somatosensory pathways can alter SEPs. This provides the basis for SEP testing. The initial or early components of the cortical sensory response are frequently utilized in intraoperative recording (see Figure 1). Early cortical potentials are relatively more

The authors note that serial somatosensory evoked potential (SEP) recording can be a useful adjunct in the operating room for monitoring the status of the spinal sensory pathways, indirectly, the structures that surround them. They describe their technique of recording SEPs and present a case report.

stable and reproducible when compared to those occurring later. Cortical SEPs, however, are sensitive to general anesthesia and some drugs. Increases in concentrations of anesthetics such as isoflurane result in decreased amplitude and increased latency in the responses. Hypothermia and hypotension can also alter the cortical SEPs. Thus, it is essential that at different times during surgery, new corrected baseline SEP values are obtained in response to changes in the above-mentioned variables.

The object of SEP monitoring is to detect deteriorating neurologic function early enough so that the surgeons or anesthesiologist can make necessary adjustments to prevent irreversible neurologic damage. The surgeons may respond to deteriorating SEPs (decreased amplitude, increased latency, or loss of waveforms) by lessening the strain on a spinal curvature, or by increasing stability in the spinal column. Changes in cortical SEPs may also indicate cerebral hypoxia or generalized hypoperfusion, and alert the anesthesiologist to correct the systemic abnormality. In order to react effectively to rapid

From the Department of Neurology, University Medical Center, Jackson, MS.

changes in the SEPs, a team approach is necessary among surgeons, anesthesiologist, and clinical neurophysiologist.

Technical Aspects

In order to introduce more standardized and reliable recording techniques, the American Electroencephalographic Society has recently established certain guidelines for intraoperative SEP monitoring.⁴ These guidelines are subject to revision as more experiences are gained with regard to recording techniques, interpretation, and clinical correlation.

For stimulation of peripheral nerves, a constant-current electrical stimulator is recommended. Recording or stimulating electrodes consist of surface disks or sterile subdermal needles. The responses to peripheral nerve stimulation are recorded simultaneously at different sites along the sensory pathways, usually at the limb (compound nerve action potentials), spine (spinal cord potentials), and scalp (cortical potentials). Thus, impairment in any segment along the somatosensory pathways may be detected in the recording. SEPs are very small in amplitude (few microvolts), and to extract these tiny

potentials from a larger and noisier background, a computer (clinical averager) is required. Several hundreds of responses are acquired, summated, and then averaged, to improve signal-to-noise ratio. In order to reduce the acquisition time, the rate of stimulation is usually fast, commonly at 3/sec.

The limitations of some equipment allow stimulation of only one limb at a time, thus restricting assessment to only one-half of the somatosensory system (left or right) at a time. Our experience with bilateral alternating limb stimulation proved to be a much more sensitive and reliable method than unilateral limb stimulation. This technique allows assessment of both halves of the spinal cord at almost the same instant.

Case Report

Figure 2 indicates SEP recordings on a 12-year-old girl who was undergoing scoliosis surgery. Cortical SEPs to left posterior tibial nerve (PTN) stimulation are shown on the left half of the figure, and those to right PTN stimulation are on the right half. The left PTN was stimulated initially, and after a delay (interstimulus interval) of 100 msec, the right PTN was stimulated. This paired sequence of nerve

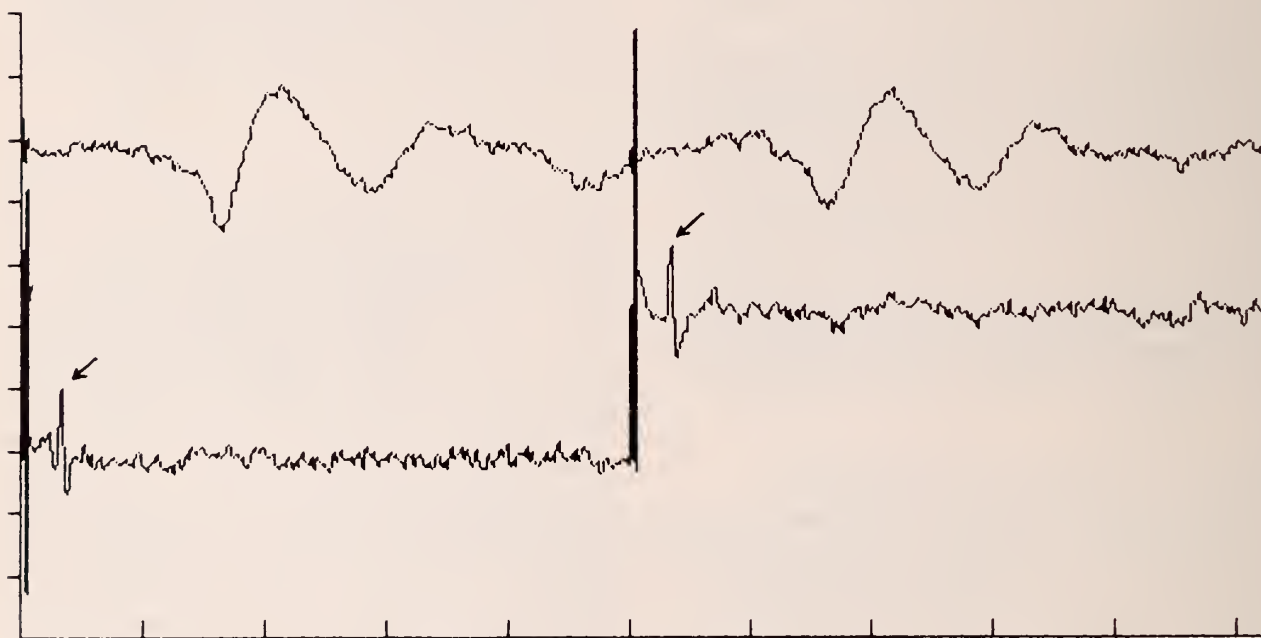


Figure 1. Examples of SEPs obtained from a patient during spinal surgery. Recording from the midcentral scalp location, the top channel shows the cortical responses to alternating left and right posterior tibial nerve (PTN) stimulation at the ankle. The cortical response to left PTN stimulation is shown on the left side of that channel, while the response to right PTN stimulation is on the right side. The middle and bottom channels contain the peripheral nerve action potentials (see arrows) from the right and left PTNs, respectively, as recorded from the popliteal fossae. Time calibration is 20 msec/div. Amplitude calibration is 1.25 μ V/div for the top channel and 1.56 μ V/div for the other channels.

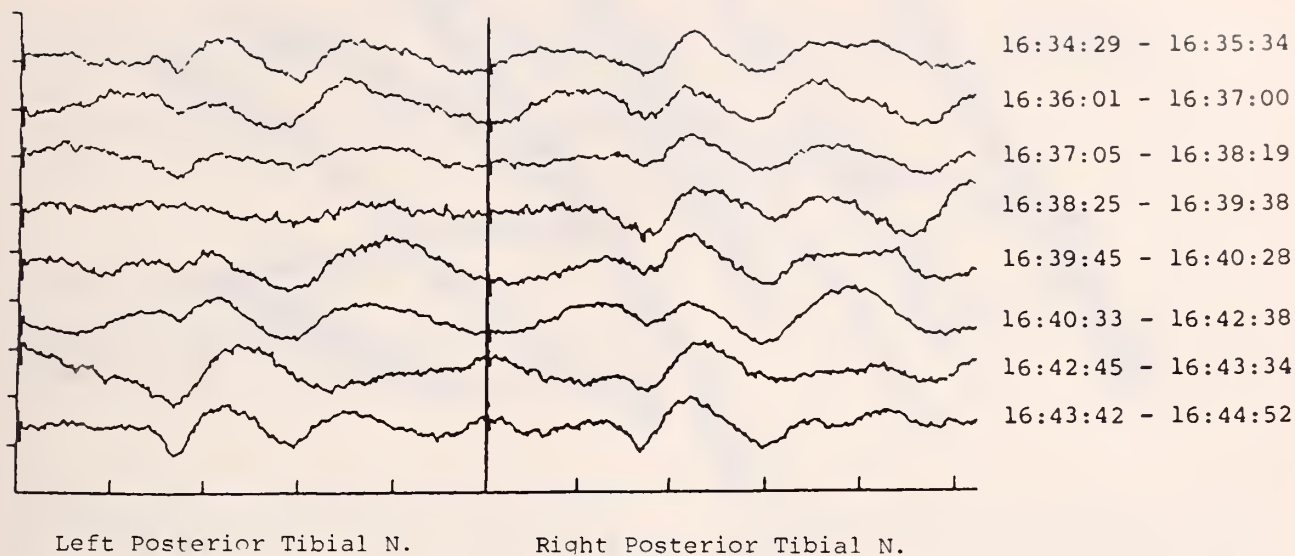


Figure 2. Serial SEPs obtained during Harrington rod placement. Cortical SEPs to left PTN stimulation at the ankle are shown on the left, and those to right-sided stimulation are on the right. The PTNs were stimulated in an alternating manner; interstimulus interval was 100 msec (see text for more explanation). Numbers on the right indicate the acquisition time for the corresponding trace; it is denoted by the interval between two exact or real times, the latter are expressed in hours:minutes:seconds. From top to bottom, the tracings are stacked sequentially. The earlier recordings are on the top, and later ones on the bottom. In the left-sided recordings, note the progressive reduction in SEP amplitude leading to disappearance of the potential. The response rapidly returned when the cause for this abnormality was corrected (see text for details). Time calibration is 20 msec/div. Amplitude calibration is 2.5 μ V/div.

activation was repeated continuously at 3.1/sec, with the corresponding cortical responses being subsequently displayed on the left and right halves of the recording channel. In this manner, the left and right somatosensory pathways can be assessed independently in nearly the same time frame.

The SEPs were serially obtained during fixation of a Harrington rod to the left side of the spine. Note that recordings from the left somatosensory pathways show progressive decline in the cortical SEP amplitude, beginning at the second trace from the top. The fourth trace shows absence of the sensory response. The corresponding peripheral nerve potentials were not altered (not shown in figure), indicating that afferent or incoming nerve impulses were intact, and there was no technical failure which could account for the reduction and disappearance of the SEPs. The surgical team was immediately alerted by these findings. Spinal manipulation and distraction was stopped, and all potential areas of increased mechanical pressure were surveyed and corrected. This maneuver led to a rapid restoration of the cortical sensory response to its previous base-

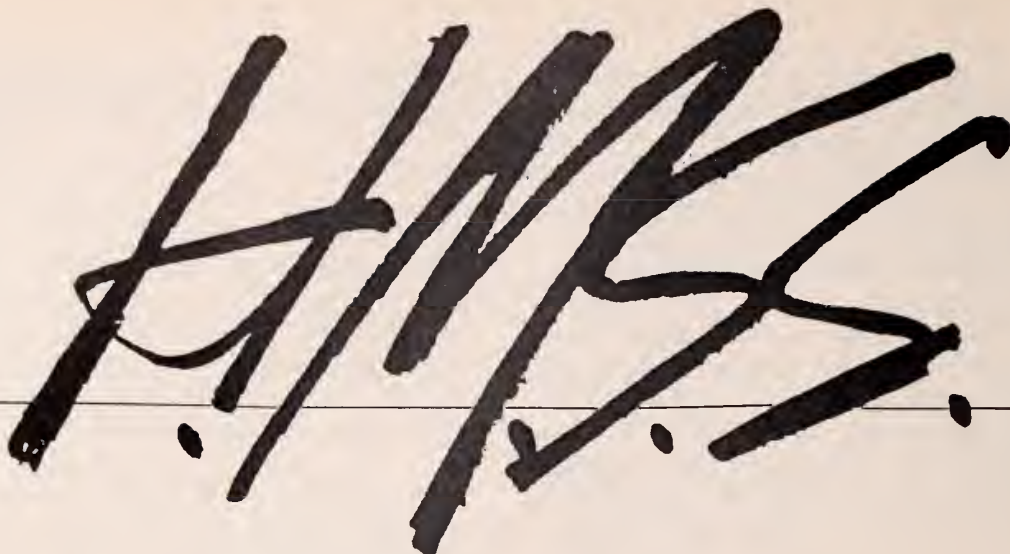
line value. At the same time, however, the right somatosensory pathways were not involved. Post-operatively, the patient had no neurologic abnormality.

This case study clearly demonstrates that abnormalities can sometimes be restricted to one side of the spinal cord. In order for SEP monitoring to be effective, both longitudinal halves of the cord need to be studied simultaneously. ★★★

2500 North State Street (39216)

References

1. MacEwen GD, Bunnell WP, Sriram K. Acute neurological complications in the treatment of scoliosis. A report of the Scoliosis Research Society. J Bone Joint Surg [Am] 1975;57:404-408.
2. Nash CL, Lorig RA, Schatzinger LA, Brown RH. Spinal cord monitoring during operative treatment of the spine. Clin Orthop 1977;126:100-105.
3. Grundy BL. Intraoperative monitoring by evoked potential techniques. In: Aminoff MJ, ed. Electrodiagnosis in clinical neurology. Second Edition. New York: Churchill Livingstone, 1986:597-618.
4. American Electroencephalographic Society. Guidelines for intraoperative monitoring of sensory evoked potentials. J Clin Neurophysiol 1987;4:397-416.



The AMA
Hospital Medical Staff Section
Twelfth Assembly

DECEMBER 1-5, 1988
LOEWS ANATOLE HOTEL
DALLAS, TEXAS

**Represent your medical staff
Become an HMSS Representative**

Meeting includes educational
forum covering incorporation of
the medical staff and the role of the
hospital medical director.

For Information Contact:

Department of Hospital Medical
Staff Services
American Medical Association
535 North Dearborn Street
Chicago, Illinois 60610
Phone (312) 645-4754 or 645-4761



Continuous Autotransfusion After Coronary Bypass Surgery

DAVID B. STEPHENS, M.D.

ELIZABETH STEPHENS, R.N., M.S.N., C.C.R.N.

Hattiesburg, Mississippi

PATIENTS' CONCERNS about the dangers of blood transfusion have become increasingly evident since the recent publicity of the acquired immune deficiency syndrome (AIDS). Blood conservation techniques have enjoyed new popularity and are utilized during many surgical procedures and frequently following cardiac operations.

The reinfusion of shed mediastinal blood following cardiac surgery has been reported principally by the groups at the Johns Hopkins University^{1, 2, 3} and the Cleveland Clinic.^{4, 5} Both groups confirm the safety and cost effectiveness of the procedure. Schaft and Hauer, *et al* at Johns Hopkins also demonstrated a 50 percent reduction in the use of homologous blood transfusion following cardiac surgery using the Sorenson autotransfusion system and intermittent reinfusion every four hours. Using a similar system, the Cleveland Clinic group failed to demonstrate a decrease in the use of postoperative homologous blood transfusion, but they did observe an occasional patient in whom the system seemed to reduce the requirement for banked blood. More recently, Cosgrove, *et al*⁶ at the Cleveland Clinic have developed a new method of continuous reinfusion of shed mediastinal blood. This system theoretically offers greater patient hemodynamic stability and safety, and increased cost effectiveness. Using this newer autotransfusion system, a review of our patients having coronary bypass surgery was undertaken.

In the autotransfusion group, pleural and mediastinal blood was collected in a Bentley BCR-3538 Cardiotomy reservoir. Blood was continuously re-transfused using an IMED 980 volumetric infusion pump and an accuset administration set. A

The authors made a retrospective analysis of 100 consecutive patients following coronary artery bypass surgery. The initial fifty patients (control group) utilized disposable chest drainage units, and the subsequent fifty patients (autotransfusion group) utilized a system of continuous autotransfusion of shed mediastinal and pleural drainage. The effects of each system on the volume of postoperative drainage, administration of packed cells, and cost was identified. They note that a significant reduction of overall cost was shown in the autotransfusion group, as well as a reduction in the requirement for blood transfusion in those patients with increased drainage.

reusable thoracic manometer connected to 20 cm of H₂O suction was utilized to establish an underwater seal for mediastinal and pleural drainage (see Figure 1).

Materials and Methods

A retrospective analysis was performed of one hundred consecutive adult patients undergoing coronary artery bypass surgery between August 1985 and January 1987. The initial fifty patients (control group) had disposable chest drainage units and the subsequent fifty patients (autotransfusion group) had their mediastinal drainage reinfused.

In the control group, a Thora-Drain III (Cheesebrough-Ponds, Inc.) underwater system was employed for collection of shed mediastinal and pleural blood. This disposable system contained water seal and suction controlled chambers which were connected to wall suction and adjusted to 20 cm of H₂O suction.

From the South Mississippi Heart Institute, Hattiesburg, MS. Presented at The Surgery Plenary Session, 120th Annual Session of The MSMA, June 17, 1988, in Biloxi, MS.

In both groups a record was maintained of the amount of drainage collected the first twelve hours in the intensive care unit. Since autotransfusion was discontinued at the end of this twelve hour period, the amount of drainage measured in this particular group also accounted for the volume of blood reinfused. Additional recordings of drainage measurements were obtained until removal of drainage tubes, usually on the second postoperative day.

The initial postoperative hemoglobin, hospital discharge hemoglobin, and volume of packed cells administered was recorded for each patient. All supplies utilized with each drainage system were identified. A cost analysis, including the cost of administering packed cells was calculated for each patient.

Additionally, both groups were submitted to multiple regression analyses as illustrated in Table 1.

Results

Both groups were comparable in sex, age, pump time, and number of grafts as shown in Table 1. However, there were significantly more patients with internal mammary artery (IMA) grafts in the autotransfusion group (58%) compared to the control group (26%).

There were no operative deaths in the 100 patients. No complications could be specifically attributed to the use of either system. No statistical

difference in re-operation for bleeding was noted between the control group (0 patients) and the autotransfusion group (two patients).

The immediate postoperative and hospital discharge hemoglobins were similar in both groups (see Table 2). There was also no difference in the amount of mediastinal drainage at 12 hours and until the tubes were removed in the two groups (see Figure 2A). As expected, when further analyzed, patients with IMA grafts had significantly more mediastinal drainage than those with only saphenous vein grafts (see Figure 2B). Although the autotransfusion group received less packed cells, this was not statistically significant ($p = .09$); however, when the differences in the number of IMA grafts in both groups and the number of grafts were statistically controlled, the autotransfusion patients received less packed cells ($p = .039$).

There was an average cost reduction of \$70 per patient favoring the autotransfusion group which was highly significant as shown in Table 2.

Discussion

The cost effectiveness and safety of postoperative autotransfusion following cardiac surgery has been well established by the groups at Johns Hopkins and the Cleveland Clinic among others.⁷ This study supports the opinions of these investigators with a savings of approximately \$70 per patient and no observed adverse reactions. Although coagulopathies, renal failure, sepsis, and pulmonary dysfunction are of concern when returning unwashed blood, these

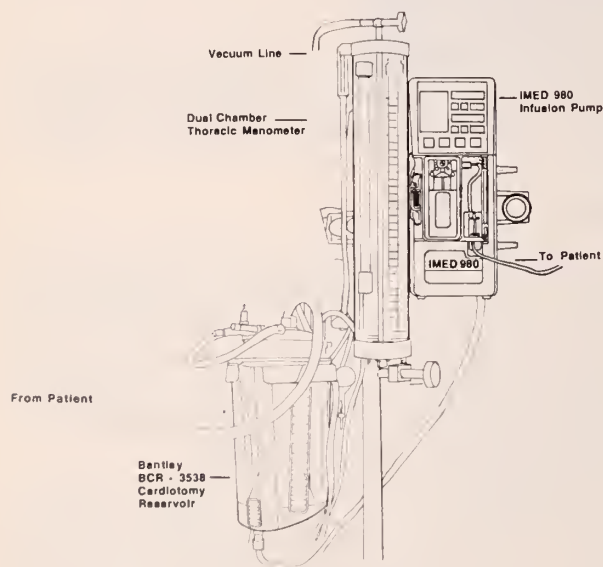


Figure 1. Diagram of the postoperative autotransfusion system.

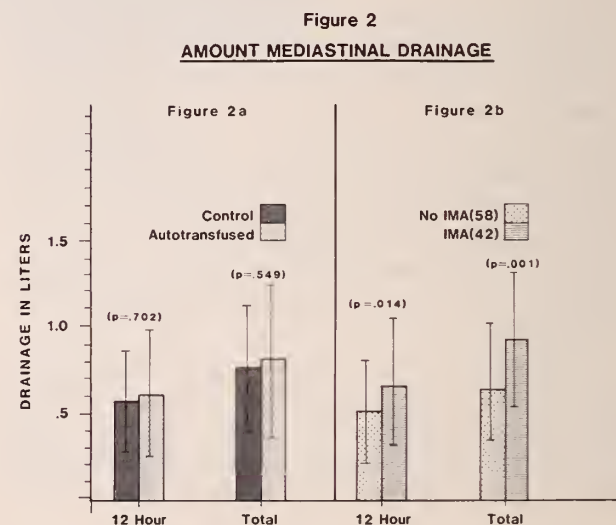


Figure 2. Amount of mediastinal drainage: (2A) control group vs autotransfused group; (2B) IMA patients vs no IMA patients.

TABLE 1
PATIENT CHARACTERISTICS

Variable	Control		Autotransfused		p Value
	Mean	S.D.	Mean	S.D.	
Number	50		50		—
Sex F/M	14/36		9/41		.342
Age (years)	59.6 ± 9.9		58.8 ± 11.3		.707
Pump time (minutes)	118.0 ± 41.4		121.6 ± 32.1		.624
No. grafts	3.1 ± 1.2		3.4 ± 1.1		.215
% IMA	26%		58%		.002

TABLE 2
RESULTS

	Control		Autotransfused		p Value
	Mean	S.D.	Mean	S.D.	
Post op hemoglobin	10.1	± 1.4	10.4	± 1.3	.252
Discharge hemoglobin	10.2	± 1.0	10.2	± 1.1	.838
Post op packed cells infused (units)	1.4	± 1.4	1.0	± .8	.090
Cost of technique	\$256.62	± 135.91	\$186.85	± 62.77	.001

complications were not noted in these patients who averaged a return of only 600 cc over a twelve hour period.

In contrast to the Johns Hopkins group, we could demonstrate a statistically significant savings in homologous blood transfusion only in patients having a higher postoperative drainage following the use of an internal mammary artery bypass. Johnson, *et al*⁸ also noted a more pronounced savings of homologous blood transfusion in patients with greater postoperative blood loss. This might explain the Cleveland Clinic's finding that autotransfusion decreased the need for banked blood only in the occasional patient.

We agree with Cosgrove, *et al* that this continuous method of autotransfusion offers benefits in both safety and cost effectiveness. Since it is a closed system, the risk of contamination is lessened, and the continuous reinfusion of lost blood allows for greater hemodynamic stability. Cost effectiveness is enhanced because the reinfusion pump and suction control are reusable, and the cardiectomy reservoir comes off the cardiopulmonary bypass circuit. The only additional cost is the inexpensive conversion kit.

Conclusion

Professionals who work with cardiac surgery patients in units with autotransfusion capabilities should be aware of the cost benefit and safety of this technique. The possibility of reducing the need for homologous blood transfusion in some patients should encourage health care professionals to become familiar with postoperative autotransfusion. The combination of skilled personnel and advanced technology offers these patients a greater opportunity for successful recovery. ★★★

415 South 28th Avenue (39401)

References

1. Schaff HV, Hauer JM, Bell WR, Gardner TJ, Donahoo JS, Gott VL, and Brawley RK: Autotransfusion of shed mediastinal blood after cardiac surgery. A prospective study. *J Thorac Cardiovasc Surg*, 75:632-641, 1978
2. Schaff HV, Hauer JM, and Brawley RK: Autotransfusion in cardiac surgical patients after operation. *Surgery*, 84:713-718, 1978
3. Schaff HV, Hauer JM, Gardner TJ, Donahoo JS, Watkins L Jr, Gott VL, and Brawley RV: Routine use of autotransfusion following cardiac surgery: Experience in 700 patients. *Ann Thorac Surg*, 27:493-499, 1979
4. Thurer RL, Lytle BW, Cosgrove DM, and Loop FD: Autotransfusion following cardiac operations: A randomized, prospective study. *Ann Thorac Surg*, 27:500-507, 1979
5. Thurer RL, and Hauer JM: Autotransfusion and blood conservation. *Curr Probl Surg*, 19:99-156, 1982
6. Cosgrove DM, Amiot DM, and Meserko JJ: An improved technique for autotransfusion of shed mediastinal blood. *Ann Thorac Surg*, 40:519-521, 1985
7. Symbus PW: Autotransfusion from hemothorax: Experimental and clinical studies. *J Trauma*, 12:689, 1972
8. Johnson RG, Rosenkrantz KR, Preston RA, Hopkins C, Daggett WM: The efficacy of postoperative autotransfusion in patients undergoing cardiac operation. *Ann Thorac Surg*, 36(2):173-179, 1983

Acknowledgement

We gratefully acknowledge the professional assistance of Dr. J. T. Johnson, faculty research consultant, and Sheri Rawls, illustrator at the University of Southern Mississippi. We also acknowledge the help of Pat Geoghagan, R.N., in cost analysis and the secretarial aid of Jane Pigott and Jorge Ann McKinley.



THE PRESIDENT'S PAGE

DAVID R. STECKLER, M.D.

AMA Membership Equals Dollars and Sense

THROUGHOUT my years of practicing medicine I have heard my colleagues express concern over the cost of membership dues.

Frankly, those are feelings that I have a hard time understanding — not because of the dollars involved but because I believe we wrongly focus on considerations of price rather than of value.

In economics there is a frequently used term.

It's called the cost-benefit ratio. The ratio measures the price of an item or service in relation to its value.

That's the way we should look at membership dues.

And I truly believe that AMA membership would withstand any cost-benefit analysis we could conduct.

With the benefits far exceeding the cost.

I am not merely referring to the tangible benefits of membership.

Benefits such as *JAMA*, *AMA News*, educational seminars, insurance programs and more.

All are significant tangible benefits provided by the AMA.

But I believe the real value of membership lies in other areas — areas not so easily defined.

To assess membership's true value, I believe we should be asking ourselves questions such as —

What is it worth to have our rights and interests represented in our state legislature as well as Congress?

The AMA serves as a clearinghouse and resource for information on health legislation in each state.

Nationally, the AMA's record in the current 100th Congress is one of tremendous accomplishment. True, we did not get everything we wanted. But no one else did either and that's the nature of the legislative process.

Consider for a minute what the AMA has accomplished on our behalf.

- Mandatory assignment has been defeated three times in the

Reimbursement Proposals Require United Response

A major topic of discussion among physicians these days is the direct effects of federal legislation and regulations on medical practice and how these will change the way we conduct our professional activities.

The Harvard Relative Value Study, the latest in a series of proposals, has been released. At this time only fragments of the proposal have been made public and it is extremely difficult to determine what to expect from the full report. Early releases indicate major shifts in reimbursement with redistribution of payments from surgical and technical procedures to the nonsurgical and cognitive activities. It is not known at this time what the proposed RVS scales will be for various types of practice, what Congress will do with the proposals, what the time schedule for implementation will be, or if the program will be structured regionally or universally applied.

It is apparent that there will be definite changes

in the way many physicians conduct their practices. As these proposals are implemented, organized medicine must present a unified front.

Based on what I have seen thus far, reaction to the Harvard study appears very fragmented. Attempting to preserve their own domain, specialty and other groups within organized medicine are preparing to challenge the proposals and subsequent regulations. This is understandable. Everyone wants to protect their own turf and medical practice. However, one has to ask, "How can medicine most effectively confront this problem?" Are we best served by the fragmented approach or a unified and concerted effort?

Now is the time for full and open discussion within the framework of organized medicine, development of a common position, and launching of a concerted effort to do what is best for our patients and the future practice of quality medicine in this country.

MYRON W. LOCKEY, M.D.
Editor

PRESIDENT'S PAGE (Continued)

House Ways and Means Committee.

- A proposed drug formulary has been stricken from the Medicare Catastrophic Health Bill.

- Due process protection has been added to the Professional Review Program.

- Further administration proposed cuts in Medicare and in payments to anesthesiologists and radiologists have been defeated.

These are just a few examples of what its worth to have AMA representation in Washington.

Here's another question we might ask ourselves to assess the value of our AMA membership.

What is it worth to have our colleagues, rather than government, define and monitor the standards

for medical training and medical care in this country?

Beginning with the Flexner Report around the turn of this century it has been the AMA which has brought medical education in this country to its present high standing.

And then how about such a seemingly mundane topic as medical terminology. The AMA is the author of the current procedural terminology (CPT-IV) now accepted by every third party payor in this country. Can you imagine the confusion that would exist without CPT-IV?

Next we might ask — what is it worth to have a representative forum in which we, along with our

colleagues across the country, can raise and argue issues, reach a consensus, and formulate policy in diverse areas of medicine?

Whether we are willing to recognize it or not, the AMA House of Delegates is truly the "House of Medicine."

If we did away with it tomorrow we would still insist that there be something in its place.

It is a necessary forum for American medicine.

We are represented in that forum by delegates we elect from our state and national medical societies.

Finally, we might ask — what is it worth to be represented in health policy litigation?

The changes in medicine over the past decade — its commercialization, pervasive regulation and new ethical demands — have made the courts a forum for the resolution of health policy issues.

This is an expensive process.

Beginning in 1984, the AMA formally recognized the need to approach the judicial system much as it does other branches of government.

The AMA now has a program called "Health Policy Litigation."

This program has a substantial budget, a detailed plan to monitor and initiate litigation and a team of outstanding lawyers.

Were we to place a dollar value on all the AMA activities I have reviewed I believe you would agree that the figure would far exceed the costs of our dues.

In fact, how can you place a dollar value on activities such as these to preserve our rights as professionals?

In the final analysis, you must decide whether you can afford to join the federation of medicine in this country — namely your county, state and American Medical Associations.

My guess is that you can afford it. My question to you is: Can you afford not to?

(P.S. I wish to acknowledge our president-elect, Dr. Ed Hill, and others who contributed their thoughts for this President's Page.) ★★★

MSMA Delegation Recognized for AMA Membership Recruitment



Members of the MSMA delegation to AMA are pictured in the blazers they received in recognition of their success in the 1988 AMA Outreach Program to recruit new members. From left are: Drs. Bill Gates, Carl Evers, Elmer Nix, Mal Morgan, Sidney Graves, Lamar Weems, Jimmy Waites, Alton Cobb, and Ed Hill. Not pictured is Dr. Gerald Gable. Outreach awards were also presented to Dr. George McGee and Dr. Tim Alford, then chairman and chairman-elect of MSMA's Young Physicians Section. The presentations were made at the AMA annual session in Chicago in June.

MEDICAL ORGANIZATION

Council Sets Preliminary Schedule For 121st Annual Session

At a meeting in Jackson in September, MSMA's Council on Scientific Assembly outlined preliminary plans for the 121st Annual Session, May 31-June 4 in Biloxi. Dr. Don Mitchell, MSMA secretary-treasurer and chairman of the Council, conducted the planning session.

Kicking off the five-day schedule is the annual meeting of the Young Physicians Section, chaired by Dr. Tim Alford of Kosciusko. The program, which will include a business session, will deal with legislative matters and other issues of importance to young physicians.

Thursday's schedule includes the opening session of the House of Delegates, reference committee hearings, and the annual meeting of the Mississippi Foundation for Medical Care.

The Friday calendar of events includes the Surgery Plenary Session, which this year will feature the James Grant Thompson Memorial Lecture, and the Medicine Plenary Session. Committees directed by Dr. Jim Hughes of Jackson and Dr. John Hassell of Laurel are in the process of completing plans for the scientific programs.

Scientific exhibits will also be on display during the week, and MSMA members are encouraged to make application now for exhibit spaces.

Hospital administrators and medical staff members will hear a special panel of speakers on Saturday morning during the annual meeting of the MSMA's Hospital Medical Staff Section. Dr. Howard Freeman of Jackson, chairman of the HMSS, is in charge of the program.

The calendar of special events includes the President's Reception on Wednesday night, medical alumni reunions on Thursday, and the annual membership banquet during the weekend. The schedule also includes the popular recreational activities — golf and tennis tournaments and the two-day deep sea fishing rodeo.

New to the schedule of activities at next year's meeting are special functions to be held in the Exhibit Hall. Plans also call for the addition of a public relations workshop for physicians.

A number of medical and surgical specialty societies will hold concurrent meetings during the week. The MSMA Auxiliary also will conduct its

annual session in conjunction with the MSMA meeting.

Election of officers, action on reports and resolutions, and installation of Dr. Ed Hill as 1989-90 MSMA president will be on the agenda for Sunday's House of Delegates session, which will conclude the 121st Annual Session. Watch for more details in future issues of the *Journal MSMA* and the "MSMA Report."

MSMA "Senior Care" Program To Assist Needy Elderly



North Delta senior citizens recently signed up for the "Senior Care" program sponsored by the Mississippi State Medical Association and the Mississippi Council on Aging. At left are Arlene Gibson, program developer for the North Delta Area Agency on Aging and Gertrude Vincent, director of SLA Jones Activity Center in Clarksdale, who assisted in the registration effort. "Senior Care" will permit a reduction in physician bills for Medicare recipients who meet certain guidelines. Following evaluation of the pilot program currently underway in the Golden Triangle and North Delta areas, "Senior Care" is expected to be implemented throughout the state.

**You're
a Professional.**

**You need Professional
Health Insurance
Coverage.**

MSMA

Benefit Plan and Trust

MSMA Benefit Plan and Trust is a superior insurance program which fulfills the quality of coverage and affordability that everyone wants.

Sponsored by the Mississippi State Medical Association, the MSMA Benefit Plan and Trust offers life and health benefits to physician members of MSMA, their employees and families.

- \$1,000,000 lifetime benefits.
- Life Coverage up to \$50,000.
- Broad benefits with fair and equitable rates.
- Management by and for physicians.
- Non-profit and administered at lowest possible cost.

For Complete Description of Benefits Write:

MSMA Benefit Plan and Trust

P.O. Box 55509
Jackson, MS 39216

PERSONALS

GEORGE ABRAHAM of Vicksburg has received the Certificate of Added Qualifications in Geriatric Medicine from the American Board of Family Practice and the American Board of Internal Medicine.

OSSAMA AL-MEFTY of UMC made a presentation at the International Symposium on Cranial Base Surgery in Pittsburgh, Pennsylvania.

VINOD ANAND of UMC taught a course at the annual meeting of the American Academy of Otolaryngology/Head and Neck Surgery in Washington, DC.

ED D. BARHAM of Clinton has been named a fellow of the American College of Radiology.

SARAH BROOM of Jackson spoke on respiratory aspects of polio at a meeting of the Mississippi Polio Survivors Association.

HARRY BUTLER has associated with Internal Medicine Clinic of Laurel for the practice of oncology and hematology.

RALPH DIDLAKE of UMC was guest lecturer for the American Nephrology Nurses' Association in Arlington, Virginia.

C. RALPH DANIEL, III of Jackson recently was elected president of the Jackson Academy of Medicine.

RICHARD FIELD, JR. of Centreville spoke to the National Advisory Committee on Rural Health in Washington, DC.

WESLEY D. GRANGER has associated with CALVIN RAMSEY of Jackson for the practice of Internal Medicine at 960 North State St.

CATHERINE HIRSCH has opened her office for the practice of gastroenterology at 3702 Jefferson Avenue in Pascagoula.

ROBERT HIGGINS of Jackson has been selected as one of the physicians for the United States Ski Team and will be traveling with the men's downhill ski team to Europe.

PATRICK HSU announces the opening of his office for the practice of obstetrics and gynecology at Magnolia Doctors Plaza in Corinth.

MAX HUTCHINSON of Tupelo spoke at a meeting of the Harrisburg Baptist Men's club.

DAVID H. IRWIN, JR. of Tupelo has been elected to fellowship in the American College of Cardiology.

KENT KIRCHNER of UMC was visiting professor at Indiana State University in Indianapolis.

G. RODNEY MEEKS of UMC presented a paper at the Central Association of Obstetricians and Gynecologists in Salt Lake City, Utah.

PHIL O. NELSON of Jackson has been named a fellow of the American College of Radiology.

CHARLES O'MARA of Jackson recently spoke at a symposium on vascular disease presented by St. Thomas Hospital in Nashville, Tennessee.

ANDREW PARENT of UMC presented a series of lectures in Shanghai, Peoples Republic of China.

ROBERT RHODES of UMC presented a paper at a meeting of the Halstead Society in Jackson Hole, Wyoming.

MEDICAL CLINIC For Sale or Lease

Due to retirement, physician who has been at this location since 1955 wishes to sell or lease medical clinic. All medical equipment, including lab and x-ray, furniture and fixtures included.

2000 square-foot building on 30 × 208.6 lot with parking in the rear. Prime Northeast Jackson location, convenient to area hospitals. Two consultation rooms, three exam rooms, minor surgery room, nurse's office, laboratory and x-ray. Ideal for 2 doctors.

For more information, please contact:

Mr. Jack Lowery
Deposit Guaranty National Bank
Trust Division
601-354-8118

PERSONALS/Continued

EDWARD E. RIGDON, formerly of Laurel, announces the relocation of his practice of vascular and general surgery to the University Medical Center in Jackson.

FELIX SAVOIE of UMC presented a paper at a meeting of the American Society for Surgery of the Hand in Baltimore, Maryland.

FRANK SCHMIDT of Pass Christian has been named a fellow of the American College of Radiology.

C. D. TAYLOR of Pass Christian was awarded the second annual Donald Evans Sutter Award for his outstanding service to Memorial Hospital in Gulfport.

DAVID TIMM of Natchez has been elected to fellowship in the American Academy of Pediatrics.

B. G. TRUNZLER announces the opening of an office for the practice of urology at 102 Tracetown in Natchez.

W. W. WALLEY of Waynesboro has been elected president of the Mississippi State Board of Medical Licensure. Other officers are WALTER ROSE of Indianola, vice president, and MATTHEW PAGE of Greenville, secretary.

LAMAR WEEMS of UMC attended meetings in Chicago of the committee on hospital medical staffs and the committee on Medicare reform of the American Hospital Association.

WILLIAM WOOD of Meridian spoke on treatment of mental illness at a meeting of Meridian area medical professionals.

TOM WOOLDRIDGE of Tupelo was a speaker at a symposium on "Treatment of Diabetes in the 80s" in Tupelo.

JOIN **MPAC** TODAY



CARAFATE[®] (sucralfate) Tablets

BRIEF SUMMARY

CONTRAINDICATIONS

There are no known contraindications to the use of sucralfate.

PRECAUTIONS

Duodenal ulcer is a chronic, recurrent disease. While short-term treatment with sucralfate can result in complete healing of the ulcer, a successful course of treatment with sucralfate should not be expected to alter the post-healing frequency or severity of duodenal ulceration.

Drug Interactions: Animal studies have shown that simultaneous administration of CARAFATE (sucralfate) with tetracycline, phenytoin, digoxin, or cimetidine will result in a statistically significant reduction in the bioavailability of these agents. The bioavailability of these agents may be restored simply by separating the administration of these agents from that of CARAFATE by two hours. This interaction appears to be nonsystemic in origin, presumably resulting from these agents being bound by CARAFATE in the gastrointestinal tract. The clinical significance of these animal studies is yet to be defined. However, because of the potential of CARAFATE to alter the absorption of some drugs from the gastrointestinal tract, the separate administration of CARAFATE from that of other agents should be considered when alterations in bioavailability are felt to be critical for concomitantly administered drugs.

Carcinogenesis, Mutagenesis, Impairment of Fertility: Chronic oral toxicity studies of 24 months' duration were conducted in mice and rats at doses up to 1 gm/kg (12 times the human dose). There was no evidence of drug-related tumorigenicity. A reproduction study in rats at doses up to 38 times the human dose did not reveal any indication of fertility impairment. Mutagenicity studies were not conducted.

Pregnancy: Teratogenic effects. Pregnancy Category B. Teratogenicity studies have been performed in mice, rats, and rabbits at doses up to 50 times the human dose and have revealed no evidence of harm to the fetus due to sucralfate. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

Nursing Mothers: It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when sucralfate is administered to a nursing woman.

Pediatric Use: Safety and effectiveness in children have not been established.

ADVERSE REACTIONS

Adverse reactions to sucralfate in clinical trials were minor and only rarely led to discontinuation of the drug. In studies involving over 2,500 patients treated with sucralfate, adverse effects were reported in 121 (4.7%).

Constipation was the most frequent complaint (2.2%). Other adverse effects, reported in no more than one of every 350 patients, were diarrhea, nausea, gastric discomfort, indigestion, dry mouth, rash, pruritus, back pain, dizziness, sleepiness, and vertigo.

OVERDOSAGE

There is no experience in humans with overdose. Acute oral toxicity studies in animals, however, using doses up to 12 gm/kg body weight, could not find a lethal dose. Risks associated with overdose should, therefore, be minimal.

DOSAGE AND ADMINISTRATION

The recommended adult oral dosage for duodenal ulcer is 1 gm four times a day on an empty stomach.

Antacids may be prescribed as needed for relief of pain but should not be taken within one-half hour before or after sucralfate.

While healing with sucralfate may occur during the first week or two, treatment should be continued for 4 to 8 weeks unless healing has been demonstrated by x-ray or endoscopic examination.

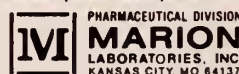
HOW SUPPLIED

CARAFATE (sucralfate) 1-gm tablets are supplied in bottles of 100 (NDC 0088-1712-47) and in Unit Dose Identification Paks of 100 (NDC 0088-1712-49). Light pink scored oblong tablets are embossed with CARAFATE on one side and 1712 bracketed by C's on the other. Issued 1/87

Reference:

1. Eliakim R, Ophir M, Rachmilewitz D: *J Clin Gastroenterol* 1987;9(4):395-399.

Another patient benefit product from



CAFAD276

0160N8



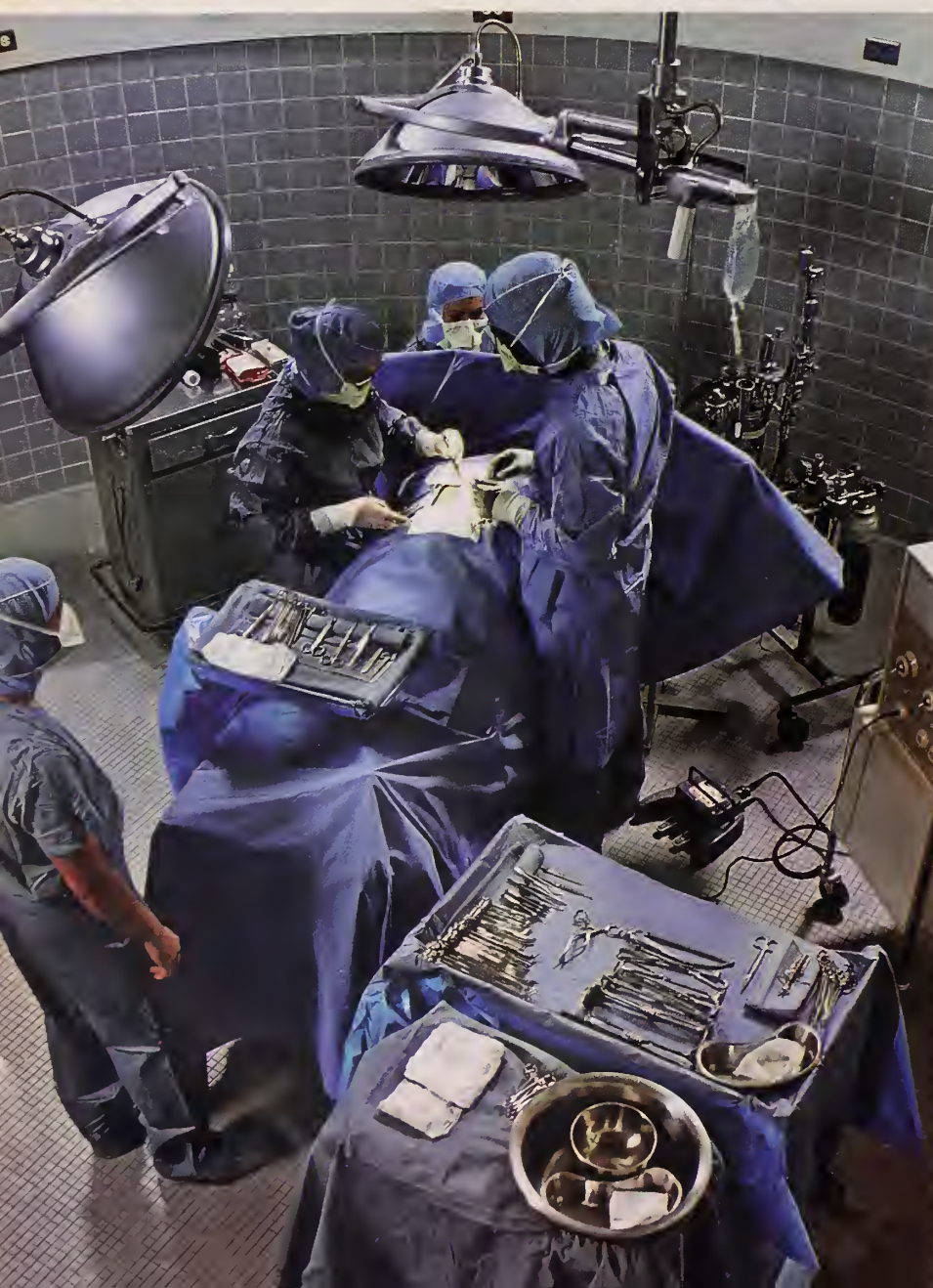
Carafate[®] for the ulcer-prone NSAID patient

Aspirin and other nonsteroidal anti-inflammatory drugs weaken mucosal defenses, which may lead NSAID users to become prone to duodenal ulcers! For those NSAID users who do develop duodenal ulcers, CARAFATE[®] (sucralfate/Marion) is ideal first-line therapy. Carafate rebuilds mucosal defenses through a unique, nonsystemic mode of action. Carafate enhances the body's natural healing ability while it protects damaged mucosa from further injury. So the next time you see an arthritis patient with a duodenal ulcer, prescribe nonsystemic Carafate: therapy for the ulcer-prone patient.



Unique, nonsystemic

CARAFATE[®]
sucralfate/Marion



EXTEND YOUR PRACTICE.

If you're looking to extend your practice, and your career, look into Army Reserve medicine.

We'll give you the opportunity to practice in a variety of challenging fields—teaching, research, patient care, even field work.

We'll also give you the kind of flexibility you can't always have in civilian hospitals, such as the chance to practice a new specialty, or to broaden your experience in your current one.

Since we know how busy you are, we'll also be flexible about the hours you work. You can join a local medical unit and normally serve sixteen hours every month plus fourteen days of active duty during the year.

Army Reserve medicine is more than a chance to broaden your practice. It's a chance to broaden your horizons.

If you would like more information about specific programs, call toll-free 1-800-USA-ARMY.

**ARMY RESERVE
MEDICINE.
BE ALL YOU CAN BE.**

Counsel to Authors

THE JOURNAL welcomes manuscripts which should be submitted to the Editors at 735 Riverside Drive, Jackson, MS 39216, in original and at least one duplicate copy. They must be typewritten double spaced on 8½ by 11-inch white paper. **Brief manuscripts (about 2,500 words or 8 pages) will be given preference over longer articles.**

The author is responsible for all statements made in his work, including changes made by the manuscript editor. Manuscripts are received with the understanding that they are not under simultaneous consideration by any other publication and have not been previously published. All manuscripts will be acknowledged, and while those rejected are generally returned to the author, the JOURNAL is not responsible in event of loss. Manuscripts accepted for publication become the property of the JOURNAL and are copyrighted by the association when published. They may not be published elsewhere without written release and permission from both the JOURNAL and the author.

All copy must be double spaced, including legends, footnotes, and references. Generous margins at the top, bottom, and on both sides of the page should be allowed. Each page after the title page should be consecutively numbered and carry a running head identifying the paper and author.

Titles should be short, specific, and clear. Ordinarily, a title should not exceed 80 characters, including punctuation.

References should be limited to a maximum of 10. If there are more than 10, the references will be omitted and a notation made to write the author for a complete list. Textbooks, personal communications, and unpublished data may not be cited as references. References must include names of authors, complete title cited, name of journal or book spelled out or abbreviated according to the *Index Medicus*, volume number, first and last page numbers, month, date (if published more frequently than monthly), and year. References should be arranged according to order listed in the text and must be numbered consecutively.

Manuscripts accepted for publication are subject to copy editing. Authors will receive galley proof prior to publication. Galley proof is only for correction of errors, and text changes

may not be made. The galley proof should be returned by the author within 48 hours from receipt, and no further changes may be made.

Illustrations consist of all material which cannot be set into type such as photographs, line drawings, graphs, charts, and tracings. Illustrations should be submitted separately from text copy. Figures and drawings should be professionally prepared with black ink on white paper. Photographs should be of high resolution, unmounted, untrimmed, glossy prints. Each must be clearly identified. No charges are made to authors for up to four illustration engravings. More are not permitted unless voted on by two editors and extra costs must be absorbed by the author.

Illustrations must be numbered and cited in the text. Legends, not exceeding 40 words and preferably shorter, must accompany each illustration, typed double spaced on separate sheets. The following information should appear on a gummed label affixed to the back of each illustration: Figure number, manuscript title, author's name, and arrow indicating top of the illustration.

In photographs in which there is any possibility of personal identification, an acceptable legal release must accompany the material.

A thesis summary of 75 to 100 words must accompany each manuscript.

Reprints may be obtained at cost plus shipping charges from the association and **should be ordered prior to publication.** The JOURNAL reserves the right to decline any manuscript. Authors should avoid placing subheads in the text, and the Editors reserve the prerogative of writing and inserting subheads according to JOURNAL style. — *The Editors.*

In addition, in view of *The Copyright Revision Act of 1976*, effective Jan. 1, 1978, transmittal letters to the editor should contain the following language: "In consideration of the Mississippi State Medical Association's taking action in reviewing and editing my submission, the author(s) undersigned hereby transfers, assigns, or otherwise conveys all copyright ownership to the MSMA in the event that such work is published by the MSMA." We regret that transmittal letters not containing the foregoing language signed by *all* authors of the submission will necessitate delay in review of the manuscript. — *The Editors.*

Introducing a new company with an array of services for physicians.

Perhaps you are thinking of adding to your practice and would like:

- A physician to help with the patient load,
- An affiliate in your facility to share costs, or
- A partner until you are ready to retire.

Perhaps you are considering selling your practice and need:

- An assessment of your practice for the purpose of marketing,
- An appraisal of the furnishings, accounts receivables, and good will,
- An individual to act as your agent.

Perhaps you are wondering about the current condition of your practice and need:

- Consultation on accounts receivables,
- Consultation on billing and collections, or
- Help with staff training.

Perhaps you are planning to start a practice and need help:

- Setting it up,
- Acquiring furniture, equipment and supplies,
- Selecting and training your staff.



Frank Cochran

Perhaps you are considering purchasing an existing practice and need:

- Someone with experience to consult with in the process, or
- Someone to act as your agent.

After 11 years of providing the above services for physicians in West Central Alabama, I have decided to serve all physicians in this capacity. I am available and can assist you with these and many other services related to practice management. For more information, please contact me at 205-556-8457.

QUALITY HEALTH RESOURCES

Post Office Box 6002 • Tuscaloosa, Alabama 35405 • (205) 556-8457
A Christian Organization — Operated on Christian principles.

NEW MEMBERS

CANNON, DON TIMOTHY, Jackson. Born Philadelphia, MS, April 17, 1959; M.D., University of Mississippi School of Medicine, Jackson, 1985; interned and medicine residency, University Medical Center, Jackson, 1985-88; elected by Central Medical Society.

COOK, JEFFREY NELSON, Meridian. Born USAFB, Germany, Sept. 22, 1954; M.D. University of Mississippi School of Medicine, Jackson, 1980; interned and ophthalmology residency, University Medical Center, Jackson, 1980-84; elected by East Mississippi Medical Society.

FESKE, STEVEN KENNER, McComb. Born Lakehurst, NJ, June 22, 1956; M.D., Louisiana State University School of Medicine, New Orleans, 1982; interned and medicine residency, Boston University Hospital, Boston, MA, 1982-86; elected by South Central Medical Society.

GLASGOW, RICHARD MEADE, Oxford. Born Chocataw County, MS, Jan. 15, 1958; M.D., University of Mississippi School of Medicine, Jackson, 1985; interned and family practice residency, University of South Alabama Medical Center, Mobile, 1985-88; elected by North Mississippi Medical Society.

GRAEBER, MICHAEL C., Jackson. Born Picayune, MS, Sept. 11, 1958; M.D., University of Mississippi School of Medicine, Jackson, 1984; interned and neurology residency, University Medical Center, Jackson, 1984-88; elected by Central Medical Society.

HALL, DAVID GENE, Natchez. Born Hazlehurst, MS, Sept. 27, 1959; M.D., University of Mississippi School of Medicine, Jackson, 1985; interned and family practice residency, University Medical Center, Jackson, 1985-88; elected by Homochitto Valley Medical Society.

HORNER, PHILIP STANLEY, New Hebron. Born Fredericton, N.B., Canada, Oct. 12, 1955; M.D., Georgetown University School of Medicine, Washington, DC, 1983; interned and family practice residency, Lancaster General Hospital, Lancaster, PA, 1983-86; elected by South Central Medical Society.

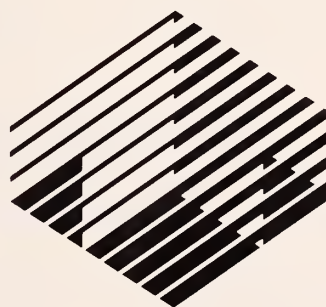
LEAVENGOOD, DOUGLAS CLINTON, Biloxi. Born Des Moines, IA, Dec. 11, 1949; M.D., University of Iowa College of Medicine, Iowa City, 1977; interned and medicine residency, Kessler AFB, Bi-

loxi, 1977-80; allergy and immunology fellowship, Fitzsimmons AMC, Aurora, CO, 1980-82; elected by Coast Counties Medical Society.

MALLETTE, ROBERT AMORY, Jackson. Born Greenville, MS, Aug. 17, 1953; M.D., University of Mississippi School of Medicine, Jackson, 1981; interned and ophthalmology residency, University Medical Center, Jackson, 1981-86; pediatric ophthalmology fellowships, Wilmer Institute, Johns Hopkins Medical Center, Baltimore, MD, 1986-88; elected by Central Medical Society.

MULVIHILL-BYERS, TERESA GAYLE, Jackson. Born Winona, MS, Oct. 4, 1957; M.D., University of Mississippi School of Medicine, Jackson, 1987; interned, one year, University Medical Center, Jackson; elected by Central Medical Society.

POMIERSKI, DAVID ANTHONY, Meridian. Born Chicago, IL, March 7, 1954; M.D., Louisiana State University School of Medicine, New Orleans, 1983; interned and orthopedic residency, Ochsner Foundation Hospital, New Orleans, 1983-88; elected by East Mississippi Medical Society.



**We earn
your trust every day.™**



Trustmark™
National Bank

Jackson/Bogue Chitto/Brookhaven/Canton/Clinton/Columbia
Georgetown/Gloster/Greenville/Greenwood/Hattiesburg/Hazlehurst
Leland/Liberty/Madison/Magee/McComb/Pearl/Petal/Ridgeland
Tylertown/Wesson

Member FDIC

NEW MEMBERS/Continued

SAMS, LUCIUS F., III, Brandon. Born Memphis, TN, March 18, 1959; M.D., University of Mississippi School of Medicine, Jackson, 1985; interned and medicine residency, University Medical Center, Jackson, 1985-88; elected by Central Medical Society.

SANGANI, BHARAT HIMATLAL, Gulfport. Born Gondal, Indiana, Oct. 20, 1957; M.D., Seth G.S. Medical College, Bombay, India, 1983; interned and medicine residency, Mt. Carmel Medical Center, Columbus, OH, 1983-86; cardiology fellowship, same, 1986-88; elected by Coast Counties Medical Society.

SIEFKER, JOSEPH DANIEL, Meridian. Born Ft. Lauderdale, FL, June 22, 1955; M.D., Louisiana State University School of Medicine, New Orleans, 1983; interned and otolaryngology residency, Duke University Medical Center, Durham, NC, 1983-88; elected by East Mississippi Medical Society.

TEASDALL, KATHY J., Jackson. Born Springdale, AR, Oct. 27, 1956; M.D., University of Mississippi

School of Medicine, Jackson, 1983; interned and otolaryngology residency, University Medical Center, Jackson, 1983-88; elected by Central Medical Society.

VAN UDEN, ROBERT THOMAS, JR., Natchez. Born Washington, DC, June 18, 1943; interned, one year, Naval Hospital, St. Albans, Queens, NY, orthopedic surgery residency, West Virginia University Medical Center, Morgantown, WV, 1972-76; elected by Homochitto Valley Medical Society.

WILLIAMS, ADA FRANCES, Laurel. Born New York, NY, June 28, 1957; M.D., Tufts University School of Medicine, Boston, MA, 1983; interned one year, University of Maryland Medical School, Baltimore; pediatrics residency, University of Medicine Medical Center, NJ, 1984-86; elected by South Mississippi Medical Society.

WILLIAMS, DAVID JOE, New Albany. Born Memphis, TN, Dec. 30, 1953; M.D., University of Mississippi School of Medicine, Jackson, 1982; interned, University Medical Center, Jackson, one year; ob-gyn residency, Georgia Baptist Medical Center, Atlanta, 1984-87; elected by Northeast Mississippi Medical Society.

TOURO INFIRMARY

CENTER FOR CHRONIC PAIN AND DISABILITY REHABILITATION

- Comprehensive combined evaluation and treatment
- 4 to 5 week inpatient program
- Rehab/medication/emotional management
- Preadmission review and interview of all cases
- Accredited by the Commission on Accreditation of Rehabilitation Facilities
- Multi-specialty team selection of consultants
- Weekly reports and conferences
- Physical capacity and work evaluation
- Physician referrals
- 11 years New Orleans experience with 1,400 patients

Referrals/Info

Jackie Chauvet (504) 897-8404

R.H. Morse, M.D.

Medical Director

MEETINGS

National and Regional

American Medical Association, Annual Meeting, June 18-22, 1989, Chicago. James H. Sammons, Executive Vice President, 535 N. Dearborn St., Chicago, IL 60610.

State and Local

Mississippi State Medical Association, 121st Annual Session, May 31-June 4, 1989, Biloxi. Charles L. Mathews, Executive Director, 735 Riverside Drive, P.O. Box 5229, Jackson 39216.

Mississippi Academy of Family Physicians, Annual Meeting, Aug. 2-6, 1989, Gulf Shores, AL. Mrs. Alyce Palmore, Executive Secy., P.O. Box 1215 Ridgeland 39158.

Amite-Wilkinson Counties Medical Society, 3rd Monday, March, June, September, December. James S. Poole, Secy., The Gloster Clinic, Gloster 39638. Counties: Amite, Wilkinson.

Central Medical Society, 1st Tuesday, February, April, October, December, 6:30 p.m., Primos Northgate Restaurant, Jackson. Patsy Douglas, Executive Secy., 735 Riverside Dr., Jackson, MS 39202. Counties: Hinds, Leake, Madison, Rankin, Scott, Simpson.

Claiborne County Medical Society, 1st Tuesday, each month, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Secy., P.O. Box 147, Port Gibson 39150. County: Claiborne.

Clarksdale and Six Counties Medical Society, 3rd Wednesday, April, and 1st Wednesday, November, 2:00 P.M., Clarksdale, Rodney Baine, Secy., 110 Yazoo Ave., Clarksdale 38614. Counties: Coahoma, Quitman, Tallahatchie, Tunica.

Coast Counties Medical Society, January, May, and November. H. S. Barrett, Secy., P.O. Box 1810, Gulfport 39501. Counties: Hancock, Harrison, Stone.

Delta Medical Society, 2nd Wednesday, April and October. Walter H. Rose, Secy., 122 E. Baker St., Indianola 38751. Counties: Bolivar, Humphreys, Leflore, Sunflower, Washington, Yazoo.

DeSota County Medical Society, 3rd Thursday, February and August, 1:00 p.m., Kenny's Restaurant, Hernando. Malcolm D. Baxter, Jr., Secy., Baxter Clinic, Hernando 38632. County: DeSoto.

East Mississippi Medical Society, 1st Tuesday, February, April, June, October, December. Charles L. Wilkinson, Secy., Mail: Ms. Jenkins, P.O. Box 4053, Meridian 39305. Counties: Clarke, Kemper, Lauderdale, Neshoba, Newton, Winston.

Homochitto Valley Medical Society, Meetings scheduled quarterly. Fred G. Emrick, Secy., P.O. Box 1488, Natchez 39120. Counties: Adams, Jefferson.

North Central District Medical Society, 3rd Wednesday, March, June, September, January. George V. Smith, 905 Avent Dr., Grenada 38901. Counties: Attala, Carroll, Choctaw, Granada, Holmes, Montgomery, Webster.

Northeast Mississippi Medical Society, 1st Thursday, March, June, September, December. Roger L. Lowery, Secy., 618 Pegram Dr., Tupelo 38801. Counties: Alcorn, Calhoun, Chickasaw, Itawamba, Lee, Monroe, Pontotoc, Prentiss, Tishomingo, Union.

North Mississippi Medical Society, 1st Thursday, April, September, December. W. A. Spencer, Secy., 2161 South Lamar, Oxford 38655. Counties: Benton, Lafayette, Marshall, Panola, Tate, Tippah, Yalobusha.

Pearl River County Medical Society, 2nd Monday, March, June, September, December. J. C. Griffing, Secy., Crosby Memorial Hospital, Picayune 39466. County: Pearl River.

Prairie Medical Society, 2nd Tuesday, March, June, September, December. Perrin N. Smith, Secy., P.O. Box 9000, Columbus 39705. Counties: Clay, Oktibbeha, Noxubee, Lowndes.

Singing River Medical Society, quarterly, December, March, June and September. John J. McClosky, Secy., 3003 Short Cut Rd., Pascagoula 39567. County: Jackson.

South Central Mississippi Medical Society, 2nd Tuesday, March, June, September, December. Julian T. Janes, Secy., 304 Clark, McComb 39648. Counties: Copiah, Franklin, Lawrence, Lincoln, Pike, Walthall.

South Mississippi Medical Society, 2nd Thursday, March, June, September, December. George R. Bush, Secy., 307 S. 13th Ave., Laurel 39440. Counties: Covington, Forrest, George, Greene, Jasper, Jefferson Davis, Jones, Lamar, Marion, Perry, Smith, Wayne.

West Mississippi Medical Society, 2nd Tuesday, January, March, May, September, October, November, 6:30 p.m., Maxwell's Restaurant, Vicksburg. Wayne M. Petrie, Secy., 1202 Mission Park Dr., Vicksburg 39180. Counties: Issaquena, Sharkey, Warren.

Mississippi Institutions and Organizations Accredited for Continuing Medical Education

The following Mississippi institutions and medical organizations have been accredited in accordance with the "Essentials for Accreditation of Institutions and Organizations Offering Continuing Medical Education Programs" of the Liaison Committee on Continuing Medical Education. Information concerning CME programs for physicians offered by these accredited sources may be obtained by writing the Director, Continuing Medical Education, at the individual institution or organization.

Council on Scientific Assembly Mississippi State Medical Association 735 Riverside Drive Jackson, MS 39202	Northwest Mississippi Regional Medical Center Box 1218 Clarksdale, MS 38614
North Mississippi Medical Center 830 Gloster Avenue Tupelo, MS 38801	North Panola County Hospital Drawer 160 Sardis, MS 38666
Forrest General Hospital Box 1897 Hattiesburg, MS 39401	Singing River Hospital P.O. Box 112 Pascagoula, MS 39567
Mississippi Baptist Medical Center 1225 N. State Street Jackson, MS 39201	Magnolia Hospital Alcorn Drive Corinth, MS 38834
Gulf Coast Community Hospital 4642 W. Beach Boulevard Biloxi, MS 39531	Greenwood Leflore Hospital 1508 Leflore Avenue Greenwood, MS 38930
Jefferson Davis Memorial Hospital Box 1488 Natchez, MS 39120	Gulfport Memorial Hospital 4500 13th Street Gulfport, MS 39501
King's Daughter Hospital Box 948 Brookhaven, MS 39601	Oxford-Lafayette County Hospital P.O. Box 946 Oxford, MS 38655
Riverside Hospital Lakeland Drive Jackson, MS 39208	St. Dominic-Jackson Memorial Hospital 969 Lakeland Dr. Jackson, MS 39216
Biloxi Regional Medical Center 1559 Lafayette St. Biloxi, MS 39533	Delta Medical Center P.O. Box 5247 Crossroads Station Greenville, MS 39704-5247
Jeff Anderson Regional Medical Center 2124 14th St. Meridian, MS 39301	Methodist Hospital P.O. Box 1311 Hattiesburg, MS 39401

PLAN NOW TO ATTEND . . .
MSMA'S 121st Annual Session
May 31-June 4, 1989
Biloxi, MS

**For a special kind of office help,
come to the Source.**

OffiSource

Business Furnishings / Supplies / Machines
277 E. Pearl St. / Jackson, MS 39205
352-9000 / Toll-free 1-800-682-5399

**NAVAL RESERVE
PHYSICIAN**

- Monthly Stipend for Physicians in training leading to qualifying as General/Orthopedic/Neurosurgeon or anesthesiologist.
- Loan repayment of up to \$20,000 for Board eligible General/Orthopedic surgeons and anesthesiologists.
- CME opportunities.
- Flexible drilling options.

*Promotion Opportunities

*Prestige

*For graduates of AMA approved
Medical Schools*

**CALL YOUR
NAVAL RESERVE FORCE
REPRESENTATIVE TODAY.**
1-800-443-6419

DEATHS

THOMPSON, CHARLES C., Columbia, MS. Born Columbia, MS, Aug. 18, 1909; M.D., Vanderbilt University School of Medicine, Nashville, 1935; interned, Vanderbilt Hospital, one year; medicine residency, Presbyterian Hospital, New York, NY, 1935-37; died July 31, 1988, age 78.

WILSON, DAVID B., Jackson. Born Yazoo City, MS, Aug. 23, 1913; M.D., Emory University School of Medicine, Atlanta, GA, 1938; interned, one year, U.S. Marine Hospital, Staten Island, NY; died Aug. 9, 1988, age 74.

POSTGRADUATE CALENDAR

PEDIATRIC ANNUAL MEETING MISSISSIPPI CHAPTER
OF THE AMERICAN ACADEMY OF PEDIATRICS
Nov. 18-19

BLAIR BATSON APPRECIATION DINNER — A reunion
of UMC faculty and residents is scheduled for
November 18 to honor Dr. Blair Batson, profes-
sor of pediatrics and chairman of the department
upon the occasion of his retirement.
University Medical Center/Ramada Renaissance
Hotel, Jackson

PERINATAL POSTGRADUATE UPDATE
Dec. 14, Special Nurses Session
Dec. 15-16, General Session
Ramada Renaissance Hotel, Jackson

For more information or a program brochure,
contact the University of Mississippi Medical Cen-
ter Division of Continuing Health Professional Ed-
ucation, 2500 North State Street, Jackson, Missis-
sippi 39216-4505; or call (601) 984-1300.

NOVEMBER 1988

CARRY LESS WEIGHT AT THE OFFICE.

The more you have on your mind, the less you
should have on your feet. That's why we created
DresSports®. Like other dress shoes, they look sty-
lish. Unlike other dress shoes, they're lightweight,
flexible, cushioned, and they
actually feel good.

After all, your feet
shouldn't slow you
down on your
way up.

Rockport®
Marlboro, Mass.



20% Professional Discount

Pennington's Shoes

1151 North State Street
Suite 112
Medical Arts Building
Jackson, Mississippi 39201-2407
Telephone (601) 355-7574

TERMS WE THINK YOU'LL LIKE...

Compare these low non-smoker annual rates for non-decreasing graded premium life:

MALE AGES	\$250,000	\$500,000	\$1,000,000
25	250.00	455.00	670.00
30	252.50	460.00	677.50
35	255.00	465.00	685.00
40	330.00	595.00	880.00
45	412.50	760.00	1,127.50
50	542.50	1,015.00	1,510.00
55	810.00	1,520.00	2,267.50
60	1,355.00	2,535.00	3,790.00
65	2,372.50	4,385.00	6,565.00

(smoker's rates slightly higher)

Renewable to age 100. Female rates same as males four years younger. All coverage provided by companies rated "A Excellent" by A.M. Best Co.

For a written quotation and policy description, call or send your date of birth and amount of coverage desired to.



SCHOENFELD
FINANCIAL COMPANIES

2970 COTTAGE HILL ROAD • SUITE 201
MOBILE, ALABAMA 36606
205 471-1340

PRINTING — OFFICE SUPPLIES

EQUIPMENT — FURNITURE



Premier Printing Company

2485 West Capitol

Jackson, Mississippi

Phone 352-4091

Say happy healthy holidays with Christmas Seals.®



This holiday season, send your friends and family your wishes for good health. There's no gift more precious! Use *Christmas Seals on all your gifts and cards. They help the American Lung Association fight lung disease and fight for clean air, too. Make everyone's holiday brighter with Christmas Seals from the American Lung Association.

It's a matter of life and breath.®

**AMERICAN
LUNG
ASSOCIATION**
The Christmas Seal People®

*Christmas Seals® is a registered trademark.
CANDY CLAUS™ ©1985 Santa's Family

Space contributed by the publisher as a public service.

Medico-Legal Brief

Default Judgment Against Physician Upheld

A physician was not entitled to have a \$702,000 default judgment against him vacated, an Arizona appellate court ruled.

The physician was an orthopedic surgeon who consulted on a case involving a serious leg fracture suffered by a patient during a motorcycle accident. The patient filed suit against the physician and others, and the physician failed to file a timely answer to the complaint. A default judgment in the amount of \$702,000 was entered against the physician.

The physician then filed an answer to the complaint and a motion to set aside the default. He claimed that he investigated the case himself for two months before taking the summons and com-

plaint to his medical malpractice liability insurance company. The physician's delay violated a provision in his insurance policy and left him without insurance coverage for the default judgment. A trial court denied his motion to set aside the default, and he appealed.

Affirming the decision, the appellate court said that the trial court did not err in refusing to set aside the default. The court said that pure carelessness was not sufficient reason to set aside the default judgment. The physician's failure to take any action on the malpractice complaint for two months after being advised by his personal corporate attorney to contact his malpractice insurance carrier was inexcusable, the court said. — *Goglia v Bodnar*, 749 P.2d 921 (Ariz.Ct.of App., Sept. 1, 1987; reconsideration denied, Oct. 23, 1987; review denied, Feb. 23, 1988)

A Commitment to Excellence in Health Care

Mississippi Emergency Association, P.A. (MEA) a physician-owned and managed group has created an environment for physicians that promotes the ideals of private practice while freeing doctors from the administrative and financial demands of the private practitioner.

Board certified or board eligible physicians in the area of Emergency Medicine, Internal Medicine, and Family Medicine are presented a variety of professional and personal rewards, including excellent salaries, benefits, and advancement opportunities.

MEA is a dynamic, growing corporation that delivers quality health care. If you would like to know what career opportunities we can offer you, send your curriculum vitae to Sheila M. Stringer or call (601) 366-6503.

**Mississippi Emergency
Association, P.A.
P.O. Box 12917
Jackson, MS 39236-2917**

PSYCHIATRIST NEEDED

The Mississippi Department of Corrections is seeking to acquire the services of a Licensed Psychiatrist to work in the correctional system. The psychiatrist would be required to provide and supervise treatment for a population of chronically mentally ill offenders. Consultations with other physicians and psychological staff would occur primarily at the Mississippi Department of Corrections Hospital. Duties of the position also require psychiatrist to conduct psychiatric evaluations of sex offenders eligible for parole and perhaps to initiate in providing treatment services for this population as well. Salary is negotiable depending upon qualifications and experiences: *\$90,000 PLUS, forty-hour week, no call, and strong compensation package.* For additional information, contact W. E. Steiger, Administrator, Mississippi Department of Corrections Medical/Dental Facility, P.O. Box E, Parchman, MS 38738. Call (601) 745-6611 Ext. 631.

PLACEMENT SERVICE

PHYSICIANS AVAILABLE

PHYSICIAN COMPLETING RESIDENCY in obstetrics and gynecology seeks practice opportunity in Mississippi. Available July 1989. Contact Greg Patton, M.D., 2325 Glenmary Avenue #2, Louisville, KY 40204.

EXPERIENCED PHYSICIAN, seeking licensure, wants position as assistant, Location flexible. P.O. Box 225, Bay Springs, MS 39422.

PHYSICIAN completing residency in general surgery, and spouse (board-eligible pediatrician) seek practice opportunities in Mississippi. Location flexible. Contact Dinesh Ranjans, M.D., 2118 Chantilla Rd., Catonsville, Md 21228.

NATIVE MISSISSIPPIAN seeking practice opportunity in Ob-Gyn. Will complete residency and be available in July 1989. Contact Walter Wolfe, M.D. 722 West Austin Dr., Peoria, IL 61614; (309) 655-2000.

PHYSICIAN completing residency in psychiatry seeks practice opportunity in Mississippi. Available July 1989. Contact DeBora Murphy, M.D., P.O. Box 53, Vahalla, NY 10595 or call (914) 592-2710.

PHYSICIANS WANTED

EMERGENCY PHYSICIANS WANTED. Part-time and full-time positions in northeast Mississippi. Call (601) 328-8385.

PHYSICIANS NEEDED in Mississippi and other southern states. All specialties needed for both rural and urban locations. Solo and multi-specialty practices available. For further information contact the Lewis Group, 1227 N. Valley Mills, Suite 200, Waco, TX 76710; phone (817) 776-4121.

PHYSICIANS WANTED AND NEEDED: Family Practice, General Surgery, Internal Medicine, OB/GYN. Excellent living conditions, exceptional school system. Terms negotiable with community visit expenses, relocation expenses, office space, guarantee cash flow, interest free line of credit for 12 to 18 months, etc. Other opportunities available. Call or write Richard Manning, Administrator, Tyler Holmes Memorial Hospital, Tyler Holmes Drive, Winona, MS 38967, (601) 283-4114.

INTERNIST needed to fill vacancy. Association with well-established internist who has excellent prac-

tice. Financial package available. One of the top industrial growth areas in Mississippi. Contact: Grenada Lake Medical Center, Grenada, MS 38901; (601) 226-8111, Paul J. Wood, chief executive director.

FAMILY PRACTICE — Join a group of seasoned peers who have been in the trenches and who want to control their practice of medicine rather than vice-versa. If you would like general medicine with the option of part-time E.R. work; if you want to reclaim your freedom, have more time for your family, and divorce yourself from all the problems associated with modern practice, i.e., exorbitant office overhead, personnel problems, tyrannosaurus-like medical record departments, phone Sandy McBrayer at 1-601-328-2525, (collect).

OB-GYNS. Private practice opportunities for two Ob-Gyn specialists in Mississippi Delta. Fully equipped 260-bed hospital. Call 601-459-2604.

PEDIATRICIANS. Private practice opportunities for two pediatricians in Mississippi Delta. Fully equipped 260-bed hospital. Call 601-459-2604.

NEUROLOGY. SEI Health Services is seeking two adult neurologists and one pediatric neurologist for a large neurological group in the Southeastern United States. Recruiting board-eligible or board-certified physicians. Competitive salary and comprehensive benefit package that includes malpractice insurance and relocation assistance. Clinical experience in EEG, EMG, evoked response, doppler ultrasound, and sleep disorders preferred. Send resume to: SEI Health Services Division, James Hacker, General Manager 7725 Little Ave., Charlotte, NC 28226; or call: (704) 542-7100.

NEVADA: FAMILY PRACTICE, INTERNAL MEDICINE, PEDIATRICS, OB-GYN, RADIOLOGY: Immediate openings in several rural communities. Guaranteed salary, full benefits including paid malpractice and possible University affiliation. No fee to applicant. Contact Sherry Semiatin, Office of Rural Health, Reno, NV 89557-0046; (702) 784-4841.

**Doctor,
Remember to include
your spouse's Auxiliary
dues when you
return your MSMA/AMA
dues payment.**

PHYSICIANS NEEDED

Physicians (especially specialists such as ophthalmologists, pediatricians, orthopedists, neurologists, etc.) interested in performing consultative evaluations (according to Social Security guidelines) should contact the Medical Relations Office. WATS 1-800-962-2230; Jackson, 922-6811; Martina Mayfield (ext. 2276) or Becky Ruggles (ext. 2300).



DISABILITY DETERMINATION SERVICES
1-800-962-2230

CLASSIFIED

1983 MIDMARK ALL ELECTRIC exam table. Good Condition. \$3,500.00. Call 601/268-5240.

MEDICAL OFFICE SPACE: 1000 sq. ft. office available August 1, 1988. In building with pediatric clinic in rapidly growing northwest Rankin County. Call 992-0110.

X-RAY MACHINE in excellent condition, medical supplies and equipment, waiting room furniture. Best offer. Call (601) 328-0830.

2V STAT STAT STAT *** Diagnostic/therapeutic decision support software, covering 69 specialties. Medical Algorithms (flow charts) are grouped according to complaint, sign, symptom, organ and system, specialty, age, and MDC/DRG. Updated medical knowledge Algorithms at your fingertips!!! Only \$5,787.00 for complete turnkey system (2V STAT Software, Knowledge base/69 Specialties. AT computer 80286/10 turbo CPU, 80MB HD, EGA monitor and card, printer and 40MB backup). 2V STAT, 2480 Windy Hill Road, Suite 201, Marietta, GA 30067; (404) 956-1855.

Index to Advertisers

CancerPay Plus	4	Pennington's Shoes	359
Disability Determination	11	Premier Printing	360
Harreld Chevy-Olds	6	Quality Health Resources	354
Eli Lilly and Co.	10	Roche Laboratories	third, fourth covers
Marion Laboratories	352, 352A	Schoenfeld Co.	360
Miss. Dept. of Corrections	361	Touro Infirmary	356
Miss. Emergency Association	361	Trustmark	355
Medical Assurance Co.	second cover	U. S. Army	352B
MSMA Benefit Plan & Trust	350	U. S. Army Reserve	8
Northtowne Printers	337	U. S. Naval Reserve	358
OffiSource	358	Jon Wimbish	338

Toxic Waste Dump.



This November 17, dump cigarettes for the day.
You may even decide to quit for life.

EVERY QUITTER IS A WINNER.
The Great American Smokeout. Nov. 17.

AMERICAN
CANCER
SOCIETY

In moderate depression and anxiety

- ➡ 74% of patients experienced improved sleep after the first *h.s.* dose¹
- ➡ First-week improvement in somatic symptoms¹
- ➡ 50% greater improvement with Limbitrol in the first week than with amitriptyline alone²

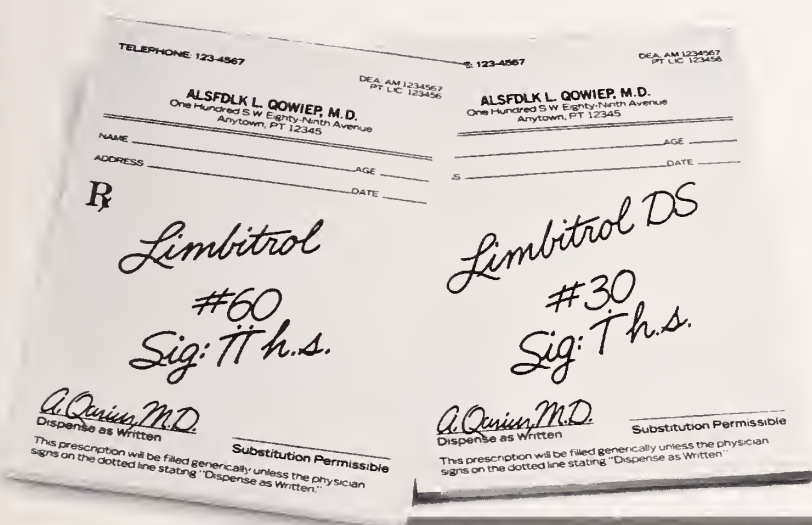
Protect Your Prescribing Decision:
Specify "Do not substitute."

Limbitrol®

Each tablet contains 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt) ^{IV}

Limbitrol® DS

Each tablet contains 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt) ^{IV}



References: 1. Data on file, Hoffmann-La Roche Inc., Nutley, NJ. 2. Feighner VP, et al: *Psychopharmacology* 61:217-225, Mar 22, 1979.

Limbitrol® Tranquilizer—Antidepressant

Before prescribing, please consult complete product information, a summary of which follows:

Contraindications: Known hypersensitivity to benzodiazepines or tricyclic antidepressants; concomitant use with MAOIs or within 14 days of monoamine oxidase inhibitors (then initiate cautiously, gradually increasing dosage until optimal response is achieved); during acute recovery phase following myocardial infarction.

Warnings: Use with caution in patients with history of urinary retention or angle-closure glaucoma. Severe constipation may occur when used with anticholinergics. Closely supervise cardiovascular patients. Arrhythmias, sinus tachycardia, prolongation of conduction time, myocardial infarction and stroke reported with tricyclic antidepressants, especially in high doses. Caution patients about possible combined effects with alcohol and other CNS depressants and against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving).

Usage in Pregnancy: Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations. Consider possibility of pregnancy when instituting therapy.

Withdrawal symptoms of the barbiturate type have occurred after discontinuation of benzodiazepines (see Drug Abuse and Dependence).

Precautions: Use cautiously in patients with a history of seizures, in hyperthyroid patients, those on thyroid medication, patients with impaired renal or hepatic function. Because of suicidal ideation in depressed patients, do not permit easy access to large quantities of drug. Periodic liver function tests and blood counts recommended during prolonged treatment. Amitriptyline may block action of guanethidine or similar antihypertensives. When tricyclic antidepressants are used concomitantly with cimetidine (Tagamet), clinically significant effects have been reported involving delayed elimination and increasing steady-state concentrations of the tricyclic drugs. Use of Limbitrol with other psychotropic drugs has not been evaluated; sedative effects may be additive. Discontinue several days before surgery. Limit concomitant administration of ECT to essential treatment. See Warnings for precautions about pregnancy. Should not be taken during the nursing period or by children under 12. In elderly and debilitated, limit to smallest effective dosage to preclude ataxia, oversedation, confusion or anticholinergic effects. Inform patients to consult physician before increasing dose or abruptly discontinuing this drug.

Adverse Reactions: Most frequent: drowsiness, dry mouth, constipation, blurred vision, dizziness, bloating. Less frequent: vivid dreams, impotence, tremor, confusion, nasal congestion. Rare: granulocytopenia, jaundice, hepatic dysfunction. Others: many symptoms associated with depression including anorexia, fatigue, weakness, restlessness, lethargy.

Adverse reactions not reported with Limbitrol but reported with one or both components or closely related drugs: **Cardiovascular:** Hypotension, hypertension, tachycardia, palpitations, myocardial infarction, arrhythmias, heart block, stroke. **Psychiatric:** Euphoria, apprehension, poor concentration, delusions, hallucinations, hypomania, increased or decreased libido. **Neurologic:** Incoordination, ataxia, numbness, tingling and paresthesias of the extremities, extrapyramidal symptoms, syncope, changes in EEG patterns. **Anticholinergic:** Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract. **Allergic:** Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus. **Hematologic:** Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia. **Gastrointestinal:** Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, black tongue. **Endocrine:** Testicular swelling, gynecomastia in the male, breast enlargement, galactorrhea and minor menstrual irregularities in the female, elevation and lowering of blood sugar levels, and syndrome of inappropriate ADH (antidiuretic hormone) secretion. **Other:** Headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, jaundice, alopecia, parotid swelling.

Drug Abuse and Dependence: Withdrawal symptoms similar to those noted with barbiturates and alcohol have occurred following abrupt discontinuance of chlordiazepoxide; more severe seen after excessive doses over extended periods; milder after taking continuously at therapeutic levels for several months. Withdrawal symptoms also reported with abrupt amitriptyline discontinuation. Therefore, after extended therapy, avoid abrupt discontinuation and taper dosage. Carefully supervise addiction-prone individuals because of predisposition to habituation and dependence.

Overdose: Immediately hospitalize patient. Treat symptomatically and supportively. I.V. administration of 1 to 3 mg physostigmine salicylate may reverse symptoms of amitriptyline poisoning. See complete product information for manifestation and treatment.

How Supplied: Double strength (DS) Tablets, white, film-coated, each containing 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt), and Tablets, blue, film-coated, each containing 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt)—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 50.



ROCHE PRODUCTS INC.
Manatí, Puerto Rico 00701

In the depressed and anxious patient

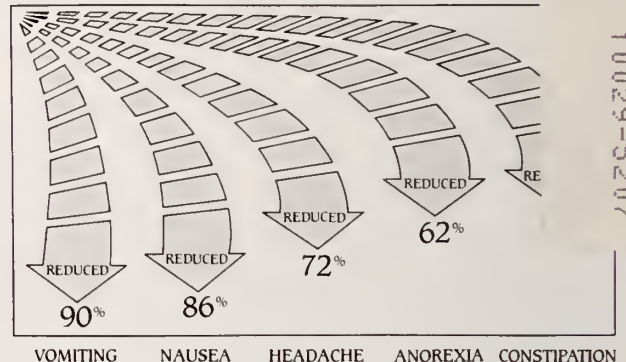
See Improvement In The First Week¹

And The Weeks That Follow

- ➡ 74% of patients experienced improved sleep after the first *h.s.* dose¹
- ➡ First-week reduction in somatic symptoms¹

Caution patients about the combined effects of Limbitrol with alcohol or other CNS depressants and about activities requiring complete mental alertness, such as operating machinery or driving a car. In general, limit dosage to the lowest effective amount in elderly patients.

Percentage of Reduction in Individual Somatic Symptoms During First Week of Limbitrol Therapy*



Limbitrol[®]

Each tablet contains 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt) (N)

Limbitrol DS[®]

Each tablet contains 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt) (N)

Copyright © 1988 by Roche Products Inc. All rights reserved. Please see summary of product information inside back cover.



JOURNAL

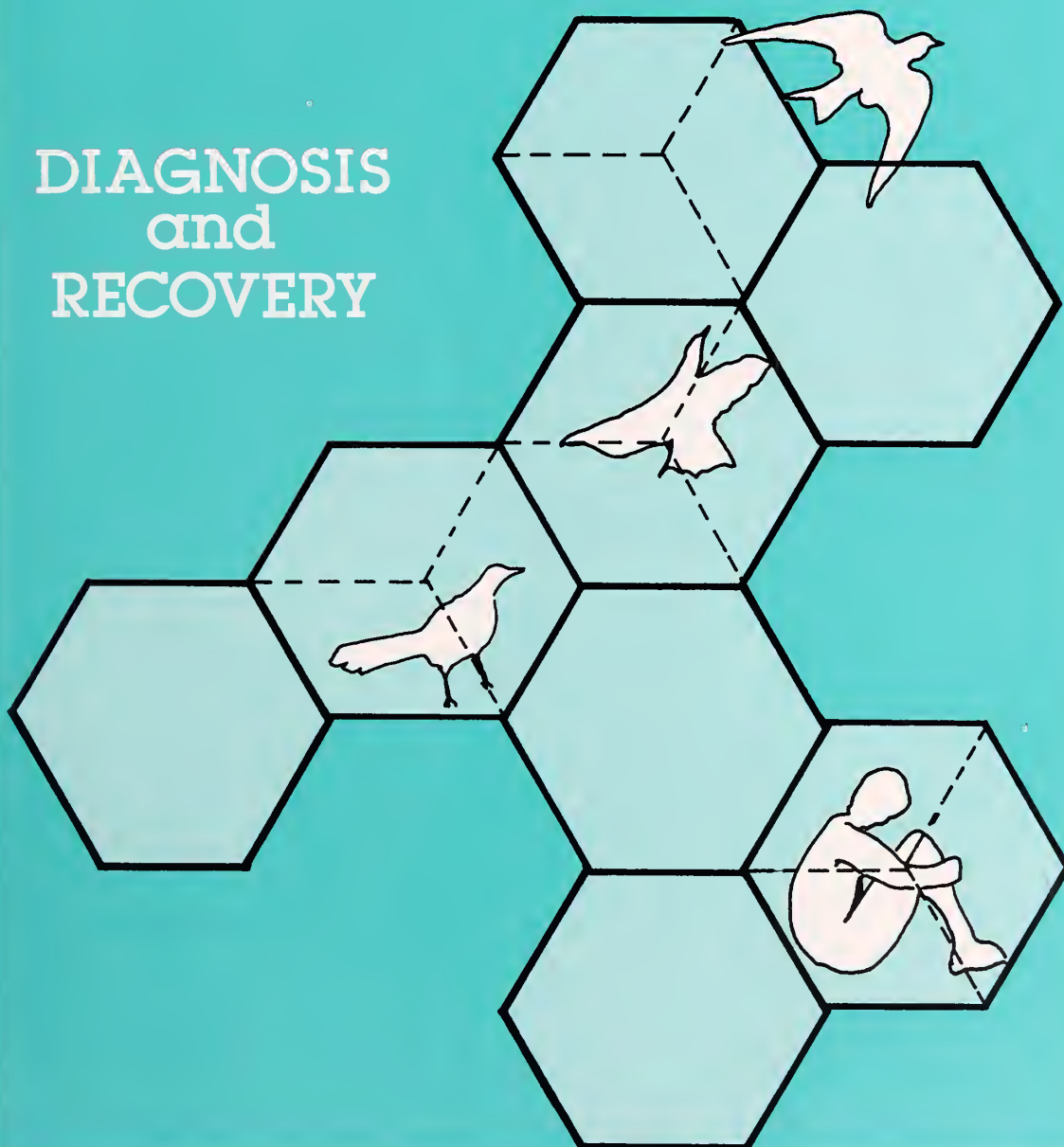
OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION

DECEMBER

1988

Chemical Dependency

DIAGNOSIS
and
RECOVERY



There is strength in numbers. *(And our numbers are growing.)*



Seated, Left to Right: Cheryl Maxwell (Claims Secretary), Lisa Noble (Underwriting Secretary), Maria Graham (Claims Secretary), Kim Ormond (Receptionist), Mike Houpt (General Manager), and C.G. "Tanny" Sutherland, M.D. (Medical Director)

Standing, Left to Right: C.R. "Bob" Montgomery (General Counsel), Lisa Stewart (Underwriting Secretary), Sharon Thompson (Claims Secretary), Craig Brown (Underwriting Manager), Joey Grimes (Controller), Chuck Dunn (Assistant General Manager), and Debbie Sutherland (Bookkeeper)

Since we wrote our first policy in November of 1977, we have grown to serve more physicians than any other medical liability insurance company in Mississippi.

Why do more physicians turn to Medical Assurance Company? Our staff has grown from two in 1978 to five in 1983 to twelve in 1988, and we have plans for additional staff even now. We have insurance professionals who can provide efficient and cost-effective

answers to your medical liability insurance questions. We serve more than 1800 Mississippi doctors – providing savings and financial strength through a program of sound investments and underwriting guidelines. Every claim is reviewed by a panel of medical and legal claims experts.

So call or come visit our staff at our offices on Riverside Drive. Let us show you *our* strength in numbers.



Medical Assurance Company of Mississippi

Street Address: Suite 301

735 Riverside Drive, Jackson, MS

Phone: (601) 353-2000

Mailing Address: P.O. Box 4915, Jackson, MS 39216-0915

MS WATS: 1-800-325-4172

JOURNAL

OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION

DECEMBER 1988

VOLUME XXIX

NUMBER 12

SCIENTIFIC

- Alcoholism: Making the Diagnosis in Your Practice** 363

H. Thomas Milhorn, Jr., M.D., Ph.D.

- Pregnancy-Associated Substance Abuse and Addiction: Current Concepts and Management** 369

James N. Martin, Jr., M.D., Rick W. Martin, M.D., L. Wayne Hess, M.D., S. W. McColgin, M.D., James F. McCall, M.D., and John C. Morrison, M.D.

- The Disease of Chemical Dependency** 375

Doyle P. Smith, M.D.

- MSMA Impaired Physicians Program: An Overview** 377

Ellis M. Moffitt, M.D.

EDITOR

Myron W. Lockey, M.D.

EDITOR EMERITUS

W. Moncure Dabney, M.D.

ASSOCIATE EDITORS

George E. Abraham, M.D.

Joseph E. Johnston, M.D.

MANAGING EDITOR

Patsy Silver

PUBLICATIONS COMMITTEE

Richard C. Miller, M.D.,
Chairman

George H. Martin, M.D.

William J. Gibson, M.D.
and the editors

THE ASSOCIATION

David R. Steckler, M.D.
President

J. Ed Hill, M.D.

President-Elect

Don Q. Mitchell, M.D.

Secretary-Treasurer

James C. Waites, M.D.

Speaker

H. Vann Craig, M.D.

Vice Speaker

Charles L. Mathews

Executive Director

EDITORIALS

- "We Care Day" in Jackson** 380

David R. Steckler, M.D.

- "Charity Hospitals"** 381

J. Edward Hill, M.D.

DEPARTMENTS

- Book Review** 382

- Medical Organization** 383

- Personals** 385

- Index to Volume XXIX** 387

- Placement Service** 392

Copyright© 1988, Mississippi State Medical Association. The views expressed in this publication reflect the opinions of the authors and do not necessarily state the opinions or policies of the Mississippi State Medical Association.

THE JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION (ISSN 0026-6393) is owned and published monthly by the Mississippi State Medical Association, founded 1856, at 735 Riverside Drive, Jackson, Mississippi 39202. Subscription rate, \$25.00 per annum; \$35.00 per annum for foreign subscriptions; \$2.25 per copy, as available. Advertising rates furnished on request. Printed by The Ovid Bell Press, Inc., Fulton, Missouri. Second-class postage paid at Jackson, Mississippi, and at additional mailing offices. POSTMASTER: Send address changes to Mississippi State Medical Association, P.O. Box 5229, Jackson, Mississippi 39216.

Introducing a new company with an array of services for physicians.

Perhaps you are thinking of adding to your practice and would like:

- A physician to help with the patient load,
- An affiliate in your facility to share costs, or
- A partner until you are ready to retire.

Perhaps you are considering selling your practice and need:

- An assessment of your practice for the purpose of marketing,
- An appraisal of the furnishings, accounts receivables, and good will,
- An individual to act as your agent.

Perhaps you are wondering about the current condition of your practice and need:

- Consultation on accounts receivables,
- Consultation on billing and collections, or
- Help with staff training.

Perhaps you are planning to start a practice and need help:

- Setting it up,
- Acquiring furniture, equipment and supplies,
- Selecting and training your staff.



Frank Cochran

Perhaps you are considering purchasing an existing practice and need:

- Someone with experience to consult with in the process, or
- Someone to act as your agent.

After 11 years of providing the above services for physicians in West Central Alabama, I have decided to serve all physicians in this capacity. I am available and can assist you with these and many other services related to practice management. For more information, please contact me at 205-556-8457.

QUALITY HEALTH RESOURCES

Post Office Box 6002 • Tuscaloosa, Alabama 35405 • (205) 556-8457

A Christian Organization — Operated on Christian principles.

NEWSLETTER

December 1988

Dear Doctor:

Plan to be in Jackson on January 18 for "We Care Day," jointly sponsored by MSMA, the Mississippi Hospital Association, the Mississippi Association of Hospital Governing Boards, and the Mississippi Organization of Nurse Executives.

"We Care Day" will include a special session of the MSMA House of Delegates, legislative information sessions, and a trip to the Capitol for discussions with legislators about two issues affecting medical care in Mississippi -- tort reform and care of the medically needy. This demonstration of professional concern can make a difference, but YOUR participation is needed. (For more information, see the "President's Page" article by Dr. Steckler in this issue.)

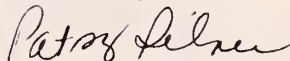
Governor Mabus has appointed a statewide committee to study medical care for the needy in Mississippi. The committee has an early January deadline for making recommendations to the 1989 Mississippi Legislature. MSMA's representatives on that committee are: Dr. Ed Hill, MSMA president-elect, Dr. Lamar Weems, immediate past president, and Dr. Jimmy Waites, speaker of the House of Delegates.

The Physician Payment Review Commission, an advisory body to the U. S. Congress, is currently conducting a study of physicians' practices. The study includes a random sample of 6,000 physicians, and the results are expected to produce recommendations on Medicare reimbursement.

By the year 2000 there will be 22.6 million people older than 65 in the United States, about 4 million more than now. One area of growth in this trend is "lifecare communities," which provide independent living with quick access to nursing care. Projections indicate a need for 4,000 of these facilities in the next ten years.

REMEMBER: MSMA's 121st Annual Session, May 31-June 4 in Biloxi.

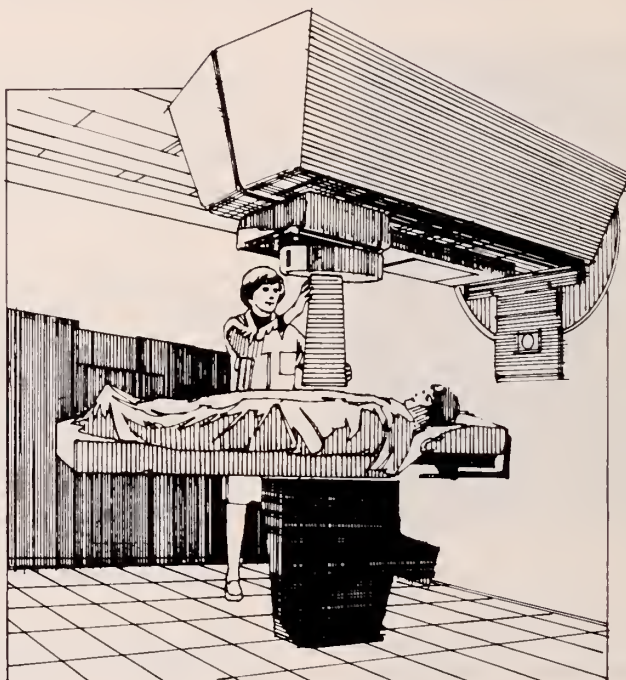
Sincerely,



Patsy Silver
Managing Editor

Now available to Mississippi State Medical Association members, protection from one of America's leading diseases **CANCER.**

"CANCERPAY PLUS"



- "CancerPay Plus" is a quality cancer policy supplement to your present health insurance.
- Offered by the Mississippi State Medical Association, "CancerPay Plus" provides excellent benefits to physician members of MSMA, their employees and families.
- Reduced rates through Association affiliation
- Payroll deducted with groups as small as one participant.
- Pays in addition to all other insurance, including Medicare.
- Intensive Care and Dread Disease riders available.

For Complete Details of Plan Call or Write:

Scott Shappley

MISSISSIPPI STATE MEDICAL ASSOCIATION

P.O. Box 55509

Jackson, MS 39216

(601) 354-5433 — Watts 1-800-682-6415

DATELINE

Your Financial Support
Needed for Caduceus Club

Jackson, MS - Voluntary, tax deductible contributions are sought to help offset expenses of MSMA's Impaired Physicians

Program. "Doctors Helping Doctors" is the motto of this highly successful program, described in an article in this issue of the Journal. Please send your contributions to the "Caduceus Club" and help continue this program of treatment and recovery for your impaired colleagues.

Deadline Approaches for
Service Award Nominations

Jackson, MS - MSMA component societies wishing to nominate a physician for the 1989 Community Service Award are reminded

of the February 15 deadline for submitting nominations. The award consists of a commemorative plaque and a \$500 contribution to a charity or civic organization designated by the award winner. The MSMA Community Service Award will be presented at the 121st Annual Session, May 31-June 1.

Physicians' Opinions on
Homecare Are Sought

Jackson, MS - A market research class at Millsaps College is attempting to determine physicians' opinions about

homecare. Physicians are finding themselves spending more time dealing with homecare agencies, the fastest growing segment of the American health care system. Some 200 physicians in the Jackson area will receive copies of the Millsaps questionnaire, and are urged to respond.

Watch for January Debut
Of American Medical Television

Chicago, IL - American Medical Television will make its debut on January 8, 1989 on the Discovery Channel. Produced by

the AMA, the program will be shown two hours a week and will carry CME credit for both scientific and socioeconomic presentations. A Washington health legislation update will be part of the programming. See JAMA beginning this month for more details.

Another State Association
Votes for AMA Unification

Chicago, IL - Montana Medical Association has become the ninth state association to require AMA unified membership. In

addition to Mississippi, other states are Arizona, Alabama, California, the District of Columbia, Idaho, Iowa, New Jersey and Pennsylvania. Two additional states (Texas and South Dakota) are currently considering AMA unification.

AIM HIGH

A PRESCRIPTION FOR PHYSICIANS

BOTHERED BY:

- ★ Too much paperwork?
- ★ The burden of office overhead?
- ★ Malpractice insurance costs?
- ★ Not enough time for the family?
- ★ No time to keep current with technology and new methods?
- ★ No time or money for professional development?

JOIN THE AIR FORCE MEDICAL TEAM; WE'LL PROVIDE THE FOLLOWING:

- ★ Competent and dedicated professional staff.
- ★ Time for patients and for keeping professionally current.
- ★ Financial security, a generous retirement for those who qualify.
- ★ If qualified, unlimited professional development.
- ★ Medical facilities all around the world.
- ★ 30 days of vacation with pay each year.
- ★ Complete medical and dental care.
- ★ Low cost life insurance.

Want to find out more? Contact your nearest Air Force recruiter for information at no obligation. Call

SSgt Jauregui
(901)278-6349
Collect or
1-800-423-USAF Toll Free

**AIR
FORCE** 



Mark Your Calendar
Now!

121st Annual Session
May 31-June 4, 1989

Biloxi, MS

ORDER
NOW FOR
CHRISTMAS!

BRUNSWICK
Since 1845

The Great Entertainers.



Your investment
into the exciting
world of home
billiards can be
your family's
best entertainment
value.

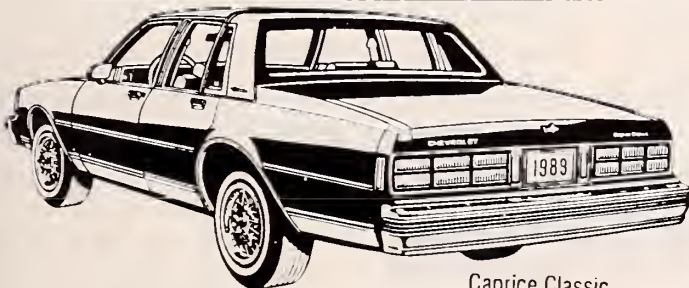
SOLD
EXCLUSIVELY
THROUGH
AUTHORIZED
Brunswick
BILLIARD
DEALERS

For color brochure & price list, call today.

Central Mississippi Amusements

(601) 982-2525

Showroom: 210 Culley Dr., Jackson



Caprice Classic
Brougham LS Sedan

FROM . . .
CLASS!

TO . . .

FAST



Camaro IROC-Z

THE
Heartbeat

OF AMERICA  TODAY'S CHEVROLET™

HARRELD CHEVY-OLDS

CALL TOLL-FREE!

JACKSON
354-2233

1-800-451-3908

CANTON
859-1611

PRINTING — OFFICE SUPPLIES

EQUIPMENT — FURNITURE



Premier Printing Company

2485 West Capitol

Jackson, Mississippi

Phone 352-4091

MEDICAL CLINIC

For Sale or Lease

Due to retirement, physician who has been at this location since 1955 wishes to sell or lease medical clinic. All medical equipment, including lab and x-ray, furniture and fixtures included.

2000 square-foot building on 30 × 208.6 lot with parking in the rear. Prime Northeast Jackson location, convenient to area hospitals. Two consultation rooms, three exam rooms, minor surgery room, nurse's office, laboratory and x-ray. Ideal for 2 doctors.

For more information, please contact:

Mr. Jack Lowery

**Deposit Guaranty National Bank
Trust Division
601-354-8118**

NAVAL RESERVE PHYSICIAN

- Monthly Stipend for Physicians in training leading to qualifying as General/Orthopedic/Neurosurgeon or anesthesiologist.
- Loan repayment of up to \$20,000 for Board eligible General/Orthopedic surgeons and anesthesiologists.
- CME opportunities.
- Flexible drilling options.

***Promotion Opportunities**

***Prestige**

*For graduates of AMA approved
Medical Schools*

**CALL YOUR
NAVAL RESERVE FORCE
REPRESENTATIVE TODAY.**

1-800-443-6419

ORIGINAL PAPERS

Alcoholism: Making the Diagnosis in Your Practice

H. THOMAS MILHORN, JR., M.D., Ph.D.

Jackson, Mississippi

ALCOHOL ABUSE is a major problem in the United States today. The estimated per capita consumption of ethanol is about 2.7 gallons per year, equivalent to the amount present in 50 gallons of beer, 20 gallons of wine or more than four gallons of liquor. Half of the total alcohol consumption can be attributed to only 10 percent of the drinking population. About 70 percent of adult Americans use alcohol. Between 5 and 10 percent of these drinkers are, or will become, alcoholics.¹

Alcoholism is a significant cause of illnesses and accidents. Patients whose medical problems are alcohol-related occupy 20 to 35 percent of adult beds in general care hospitals. Alcoholism is reported to be among the three leading causes of death in the United States today. Estimates of alcohol-related deaths per year run as high as 200,000. More than half of automobile-accident fatalities, as well as nearly half of all violent deaths from accidents, homicides and suicides, involve alcohol.²⁻⁵

Problems in Diagnosis

Physicians and patients are products of the same culture, one in which most people believe that alcoholism is a weakness, not an illness. This feeling is largely due to inadequate education about alcoholism in medical schools. Effective physician education has been found to increase the diagnosis of alcoholism.⁶

There is a common belief that alcoholics differ from other patients in their appearance. The myth persists that most alcoholics can be recognized as skid-row bums. Actually, these individuals account for only about 3 percent of alcoholics.⁴

The problem of diagnosis is further compounded by denial, a hallmark of alcoholism. The alcoholic may firmly believe that the problem is not alcohol but something else and will continue to drink in spite of psychologic, social or medical contraindications. The worst mistake a physician can make in dealing with an alcoholic is to fall into the trap of agreeing with the patient that there is a reason to drink. Denial is not exclusive to the alcoholic. Frequently, the spouse and children cover up for an alcoholic out of misguided love and a reluctance to face the embarrassment of admitting the truth. The physician must be careful not to become a part of this denial system.⁴

Many physicians face an additional problem: they don't want to diagnose an illness they do not know how to treat. Consequently, they limit their responsibility to treating the late medical sequelae of alcoholism and only warn their patients that alcohol is damaging their bodies and that they should stop drinking. Physicians frequently do not realize that the problem is not that simple. Alcoholics cannot stop drinking without help; if they could, they would. As with other chronic illnesses, the earlier the diagnosis is made and the patient begins treatment, the better the outcome. Effective treatment is available.

From the Department of Family Medicine, University Medical Center, Jackson MS.

Definition

The American Medical Association defines alcoholism as "an illness characterized by significant impairment that is directly associated with persistent and excessive use of alcohol. Impairment may involve physiological, psychological or social dysfunction."⁷ Several things are implied in this definition. First, alcoholism is recognized as a disease. Second, the quantity, frequency and duration of alcohol intake are not part of the definition. Withdrawal symptoms on cessation of drinking are also not part of the definition of alcoholism. Finally, it is clearly stated that dysfunction from drinking may be physiologic (medical problems), psychologic (behavioral problems), or social (problems with job, home, interpersonal relationship). More simply, alcoholism can be defined as the continuation of drinking when it would be in the patient's best interest to stop.

Alcoholism is a chronic, progressive disease that may take five to 20 years to develop. Relapses can be part of the disease. The ultimate outcome is death, if excessive drinking continues.⁵

Making the Diagnosis

A number of diagnostic tools are available to help physicians make the diagnosis of alcoholism. These include screening questionnaires, the patient's personal and family history, laboratory test and physical examination. In addition, the National Council on Alcoholism has identified findings that are individually adequate for a diagnosis of alcoholism.

Screening Questionnaires

Who should be screened for alcoholism? Anyone who consumes alcoholic beverages is at risk for this disease. Therefore, anyone answering yes to the question "Do you drink?" should be screened. Ideally, screening can be part of every new patient's medical history and part of the history for each periodic physical examination. Two short, self-administered screening questionnaires are currently in use — the Short Michigan Alcoholism Screening Test (SMAST) and the CAGE questionnaire.

The SMAST is a shortened, 13-question version of the original Michigan Alcohol Screening Test (MAST), which consists of 24 questions.^{8,9} The SMAST has been shown to be as effective as the MAST and to have greater than 90 percent sensitivity. It can be administered to either the patient or the spouse. Some false-positive results do occur. The SMAST deals with the consequences of drinking rather than the quantity or frequency of drinking.^{9,10}

TABLE 1

BEHAVIORAL FINDINGS THAT MAY INDICATE ALCOHOLISM

Anxiety, depression, insomnia, suicide attempts, social isolation
Self-medication, regular or prolonged use of sleeping pills or tranquilizers or repeated requests for them
Divorce or separation
Interpersonal problems at work or frequent job changes
Other job problems (showing up late for work, calling in sick, absenteeism, decreased productivity)
Frequent moves to new areas
Child or spouse abuse
School problems in children; disturbed or runaway children
Preoccupation with recreational drinking
Binge drinking or gulping of the first two or three drinks
Use of alcohol before any visit to physician's office
Loss of interest in nondrinking activities
Drinking before a party (in case there is not enough to drink at the party)
History of increasing tolerance to alcohol; loss of tolerance in older individuals
Repeated attempts to stop drinking; patient claims that he or she can stop drinking any time
Any drinking-related arrests or citations for driving under the influence
Blackouts (not remembering what happened during drinking spells)
Complaints by family members about behavior related to alcohol

Adapted from Milhorn, HT Jr. The Diagnosis of Alcoholism. *Am Fam Physician* 1988;37:175-183.

The CAGE questionnaire is even shorter and easier to administer than the SMAST; however, it is much more likely to give false-positive results. Like the SMAST, it has a high degree of sensitivity. Either test is acceptable as a screening tool.^{11,12}

Personal and Family History

As part of the personal history related to alcoholism, the following areas should be covered: alcohol history, other drug history (including prescription drugs), social functioning, psychologic functioning and sexual functioning. In addition, a standard medical history should be obtained, with special attention to medical problems associated with alcoholism. The review of systems may also reveal problems related to alcoholism. The most important questions relate to what alcohol is doing to the patient's life.

A history of other drugs used, especially sedatives and hypnotics, is important. Sedatives and hypnotics are frequently prescribed to alleviate the insomnia, nervousness and irritability caused by alcohol. This practice is inadvisable because the alcoholic usually continues to drink and takes the tranquilizers and sleeping pills as well. I tell my recovering-alcoholic patients that the brain doesn't

know the difference between alcohol and diazepam—both are to be avoided.

A blackout is a relatively early symptom in the natural history of alcoholism. The alcoholic simply does not remember what happened during a drinking episode. Alcoholics adapt to blackouts and consider them part of their drinking pattern.⁵

Alcoholics frequently demonstrate a high tolerance to alcohol. This may be reported with pride as an ability to “drink everyone else under the table.” A remark of this kind may be a clue to the need for further questioning. With the development of chronic liver dysfunction, tolerance often reverses, so that the older alcoholic begins to get “high” more easily.⁵

Alcohol is notorious for causing sexual dysfunction, usually impotence in men and menstrual irregularities and infertility in women. Decreased libido may occur in either sex. Questions about sexual functioning should always be included in the medical history.¹

The social history should include questions about work problems, family problems and problems with other interpersonal relationships. The results may point to psychologic dysfunctions commonly seen in alcoholics. Behavioral findings that may indicate alcoholism are given in Table 1.¹³

The family history may also give useful infor-

mation. A tendency to alcoholism runs in families and is thought to be genetically transmitted. A male patient whose father was an alcoholic, for example, may have up to a ninefold increase in risk over the general public.¹⁴

Laboratory Tests

Abnormal laboratory test results may be associated with alcoholism (see Table 2).¹³ The most sensitive enzyme test for liver disease is the serum gamma-glutamyltransferase (GGT) determination, yet the results are abnormal in only 63 percent of alcoholics. GGT is a hepatic microsomal enzyme that is subject to induction. Alcoholism is the most common cause of an elevated value. Both obesity and anticonvulsants may be nonalcoholic causes of elevated SGGT. The level is normally higher in men than in women.^{5, 7, 15, 16}

Abnormal laboratory values are not diagnostic of alcoholism, but they should arouse suspicion and prompt physicians to ask pertinent questions. The absence of abnormal laboratory findings does not rule out alcoholism.

Physical Examination

Every physician is familiar with signs and symptoms of the late sequelae of alcoholism (eg, cirrhosis of the liver, ascites, pancreatitis with or without pseudocysts, cardiomyopathy, esophageal varices).

TABLE 2
LABORATORY VALUES THAT MAY BE ABNORMAL IN ALCOHOLICS

Measurement	Normal Range	Alcoholic Change
Gamma-glutamyltransferase	Male: 15-85 u/L (0.25-1.42 μ kat/L) Female: 5-55 u/L (0.08-0.92 μ kat/L)	Increased
Alanine aminotransferase	6-36 u/L (0.10-0.60 μ kat/L)	Increased
Aspartate aminotransferase	10-40 u/L (0.17-0.67 μ kat/L)	Increased
Alkaline phosphatase	13-39 u/L (0.2-0.6 μ kat/L)	Increased
Lactate dehydrogenase	60-120 u/L (1.00-2.00 μ kat/L)	Increased
Bilirubin (total)	0.3-1.0 mg/dL (5-17 μ mol/L)	Increased
Amylase	4.0-25 u/L (0.07-0.42 μ kat/L)	Increased
Uric acid	3.0-7.0 mg/dL (180-420 μ mol/L)	Increased
Triglyceride	40-150 mg/dL (0.46-1.70 mmol/L)	Increased
Cholesterol	120-220 mg/dL (3.10-5.70 mmol/L)	Increased
Mean corpuscular volume	80-94 μ m ³ (80-94 fL)	Increased
Prothrombin time	11.0-12.5 seconds	Prolonged
Calcium	8.0-10.5 mg/dL (2.00-2.62 mmol/L)	Decreased
Phosphorus	3.0-4.5 mg/dL (1.00-1.45 mmol/L)	Decreased
Magnesium	1.5-2.0 mEq/L (0.76-1.00 mmol/L)	Decreased
Blood urea nitrogen	8-25 mg/dL (3.0-9.0 mmol/L)	Decreased
White blood cell count	4,300-10,800/mm ³ ($4.3-10.8 \times 10^9$ /L)	Decreased
Platelet count	150,000-300,000/mm ³ ($150-350 \times 10^9$ /L)	Decreased
Hematocrit	Male: 45-52% (0.45-0.52) Female: 37-48% (0.37-0.48)	Decreased
Glucose	70-110 mg/dL (3.9-6.1 mmol/L)	Decreased or increased

Adapted from Milhorn, HT Jr. The Diagnosis of Alcoholism. Am Fam Physician 1988;37:175-183.

TABLE 3
COMMON PHYSICAL FINDINGS IN ALCOHOLICS

Head, eyes, ears, nose, throat: Poor dentition, oropharyngeal lesions, hoarseness, plethoric facies, parotid enlargement
Chest: Repeated upper respiratory and bronchial infections, signs and symptoms of aspiration pneumonia, lobar pneumonias (especially *Klebsiella* and pneumococcal types), tuberculosis, fractured ribs
Cardiovascular system: Cardiac arrhythmias, sinus tachycardia, hypertension, cardiomyopathy
Abdomen and gastrointestinal system: Ascites, large or small liver, caput medusae, palpable spleen, abdominal tenderness (gastritis, ulcers, duodenitis, esophagitis, ileitis, irritable bowel syndrome, pancreatitis), findings compatible with advanced liver disease (loss of secondary sex characteristics, hemorrhoids, spider angiomas, palmar erythema, gynecomastia)
Musculoskeletal system: Gout (especially if it is difficult to control), trauma, avascular necrosis of the femoral head in a young adult, myopathy (primarily in shoulders and hips)
Dermatologic system: Cigarette burns, bruises, seborrheic dermatitis, rosacea, palmar erythema
Genitourinary system: Impotence, menstrual disturbances, infertility, testicular atrophy, feminization in men, masculinization in women
Neurologic system: Peripheral neuropathy, memory deficits, cerebellar degeneration, subdural hematoma, cerebral atrophy in a relatively young person, optic neuropathy, seizure disorder, tremor

Adapted from Milhorn, HT Jr. The Diagnosis of Alcoholism. *Am Fam Physician* 1988;37:175-183.

TABLE 4
DIAGNOSTIC CRITERIA FOR ALCOHOLISM

The diagnosis requires only one of the following criteria:
 Physiologic dependence (withdrawal signs and symptoms)
 Gross tremor (alcohol-related)
 Hallucinoses (hallucinations with a clear sensorium)
 Withdrawal seizures
 Delirium tremens
 Alcohol tolerance
 Blood alcohol concentration >0.1 mg percent during any office visit
 Blood alcohol concentration >0.15 mg percent without obvious signs of intoxication
 Blood alcohol concentration >0.30 mg percent at any time
 Consumption of a fifth of whiskey or an equivalent amount of wine or beer daily on more than one day by a 180-lb individual
 Major alcohol-related illness
 Alcoholic hepatitis
 Alcoholic cerebellar degeneration
 Continued drinking despite strong contraindication(s) known to the patient
 Medical contraindication (pregnancy, alcohol-related medical problems)
 Social contraindication (divorce, separation, loss of job, arrest or citation for driving under the influence of alcohol)
 Blatant and indiscriminate use of alcohol (skid-row behavior)

Adapted from Milhorn, HT Jr. The Diagnosis of Alcoholism. *Am Fam Physician* 1988;37:175-183.

The real challenge is to make the diagnosis of alcoholism early enough to prevent the disease from reaching this stage.

The physical examination offers many clues to alcoholism (see Table 3).¹³ Alcoholics may have small bruises in a variety of sites and colors, depending on the length of time since their occurrence. This is particularly true of female alcoholics, who tend to bump into furniture and doorknobs while doing housework. Cigarette burns on the fingers, chest or legs may be indicative of alcoholism. Severe periodontal disease, in an otherwise neat and clean patient, is another clue.⁵

Mild to moderate hypertension is quite common among alcoholics. The hypertension usually disappears within a week after cessation of drinking.⁷

Gouty attacks are precipitated in some alcoholics by an elevated uric acid level. The attacks dissipate once drinking has stopped and the uric acid level has returned to normal. Gout may be particularly difficult to control in alcoholics.⁷

A first grand mal seizure in an adult should raise the suspicion of alcoholism, especially if there is a history of cessation of drinking in the previous 72

hours. A seizure within a few days of admission to a hospital may be a manifestation of alcohol withdrawal.⁵

When cancer of virtually any segment of the gastrointestinal tract is discovered, the patient should be questioned about drinking. The incidence of cancers of the oral cavity, tongue, pharynx, larynx, esophagus, stomach, liver, pancreas, colon and rectum is higher in alcoholics. Alcohol appears to act synergistically with cigarette smoking in this regard.^{1,7}

A radiograph showing multiple rib fractures in different stages of healing is also a clue to alcoholism. Fracture of the ribs is the most common abnormality found in chest films of alcoholics.⁵

Digestive problems are the most frequent medical complaints of alcoholics. Alcohol is a direct irritant to the gastric mucosa and can cause gastritis, ulcers, duodenitis, illitis, irritable bowel syndrome and pancreatitis.⁷

Criteria for Alcoholism

The National Council on Alcoholism considers the criteria listed in Table 4 to be diagnostic of

alcoholism.¹³ Any one finding is sufficient to make the diagnosis.⁷ It should be noted that these criteria represent an advanced state of alcoholism.

Conclusion

Alcoholism has been characterized as the most untreated treatable disease in the United States today.¹⁷ It may take years to develop fully. Without treatment it progressively gets worse. Physicians are in an ideal position to make the diagnosis of alcoholism and get the patient into treatment. They must be aware that the problem exists in their practices and must be willing to recognize and pursue diagnostic clues when they are present. Physicians must be willing to accept alcoholism as a disease rather than a problem of weak will. Merely advising alcoholics to stop drinking is ineffective; they cannot do so without help. Finally, physicians must be willing to increase their knowledge of alcoholism. Lack of education is directly linked to negative attitudes toward alcoholic patients. Such attitudes interfere with the possible recovery of these patients.

2500 North State Street (39216)

References

1. Petrakis PL, ed. Sixth special report to the U.S. Congress on alcohol and health from the Secretary of Health and Human Services. Rockville, Md.: National Institute on Alcohol Abuse and Alcoholism, 1987.
2. Sherin KM, Piotrowski ZH, Panek SM, Doot MC. Screening for alcoholism in a community hospital. *J Fam Pract* 1982;15:1091-5.
3. Schuckit MA. Drug and alcohol abuse: a clinical guide to diagnosis and treatment. 2d ed. New York: Plenum, 1984:44-82.
4. Mooney AJ. Alcohol abuse and dependence. In: Taylor RB, ed. Family medicine: principles and practice. 2d ed. New York: Springer-Verlag, 1983:1632-61.
5. Gitlow SE, Peyser HS, eds. Alcoholism, a practical treatment guide. New York: Grune & Stratton, 1980:23-45.
6. Mulry JT, Brewer ML, Spencer DL. The effect of an inpatient chemical dependency rotation on residents' clinical behavior. *Fam Med* 1987;19:276-80.
7. Wilford BB, ed. Review course syllabus. New York: American Medical Society on Alcoholism and Other Drug Dependencies, 1987.
8. Selzer ML. The Michigan alcoholism screening test: the quest for a new diagnostic instrument. *AM J Psychiatry* 1971;127:1653-8.
9. Selzer ML, Vinokur A, van Rooijen L. A self-administered Short Michigan Alcoholism Screening Test (SMAST). *J Stud Alcohol* 1975;36:117-26.
10. Creek LV, Zachrick RL, Scherger WE. The use of standardized screening tests in family practice. *Fam Pract Res J* 1982;2:11-7.

JOURNAL MSMA policy prohibits publishing more than ten references. For a complete bibliography, please contact the author.

TOURO
I N F I R M A R Y

CENTER FOR CHRONIC PAIN AND DISABILITY REHABILITATION

- Comprehensive combined evaluation and treatment
- 4 to 5 week inpatient program
- Rehab/medication/emotional management
- Preadmission review and interview of all cases
- Accredited by the Commission on Accreditation of Rehabilitation Facilities
- Multi-specialty team selection of consultants
- Weekly reports and conferences
- Physical capacity and work evaluation
- Physician referrals
- 11 years New Orleans experience with 1,400 patients

Referrals/Info

Jackie Chauvet (504) 897-8404

R.H. Morse, M.D.

Medical Director

THE ARMY RESERVE OFFERS NEW FINANCIAL INCENTIVES FOR RESIDENTS.



If you are a resident in Anesthesiology or Surgery*, the Army Reserve has a new and exciting opportunity for you. The new Specialized Training Assistance Program will provide you with financial incentives while you're training in one of these specialties.

Here's how the program can work for you. If you qualify, you may be selected to participate in the Specialized Training Program. You'll serve in a local Army Reserve medical unit with flexible scheduling so it won't interfere with your residency

training, and in addition to your regular monthly Reserve pay, you'll receive a stipend of \$678 a month.

You'll also have the opportunity to practice your specialty for two weeks a year at one of the Army's prestigious Medical Centers.

Find out more about the Army Reserve's new Specialized Training Assistance Program.

Call or write your US Army Medical Department Reserve Personnel Counselor:

**ARMY RESERVE MEDICINE
2100 16th AVE. SOUTH
SUITE 303
BIRMINGHAM, AL 35205
(205) 930-9719 COLLECT**

* General, Orthopaedic, Neuro, Colon/Rectal, Cardio/Thoracic, Pediatric, Peripheral/Vascular, or Plastic Surgery.

ARMY RESERVE MEDICINE. BE ALL YOU CAN BE.

Pregnancy-Associated Substance Abuse and Addiction: Current Concepts and Management

JAMES N. MARTIN, JR., M.D.

RICK W. MARTIN, M.D.

L. WAYNE HESS, M.D.

S. W. McCOLGIN, M.D.

JAMES F. McCALL, M.D.

JOHN C. MORRISON, M.D.

Jackson, Mississippi

PERINATAL PSYCHOTROPIC DRUG USE, abuse and addiction has grown to epidemic proportions in the United States.¹ No social strata, whether wealthy or poor, professional or unskilled, is immune to the ravages of the disease of chemical dependency or to the excesses of substance use and abuse. Although drug use of all types including alcohol appears to be increasing in this country, it appears to be increasing at a faster rate among women than men and the overwhelming majority of this population are reproductively active.² In 1981, almost 58 million prescriptions in the United States were written for codeine and combination narcotic analgesics.³ Not far behind the second-place antiarthritics in number of prescriptions were the third-place benzodiazepine minor tranquilizers, psychotropic drugs with substantial abuse and addiction potential.³ Moreover, no less than one of every ten adult Americans misuses mood-altering substances — alcohol, psychotropic drugs, narcotics, antianxiety agents, tranquilizers, diet medications, etc. — to the point of abuse or addiction.⁴ The World Health Organization has estimated that alcoholism as one form of the disease of chemical dependency will be the world's number one health problem by the year 2000.⁵

It is now abundantly clear that gestational abuse of any mood-altering substance such as alcohol or

narcotics can cause serious maternal and perinatal problems. The true extent of drug use during pregnancy is unknown because it is always minimized or denied by patients when questioned as a consequence of society, personal and ethical sensitivities to revealing the truth. Yet several surveys during the last two decades have determined that two of the three most commonly used drugs during pregnancy are nicotine and alcohol (iron is number three).⁶ The prevalence and sequelae of both legal and illicit psychotropic drug use during pregnancy constitute powerful arguments that we have a significant maternal and perinatal health care problem at present which will continue to grow year by year, a problem that must be addressed by all perinatal health care delivery systems including ours in Mississippi.

Although the indiscriminate use of any drug truly constitutes drug abuse, Finnegan considers the working definition of drug abuse to be excessive self-administration of mood-altering chemicals which alters the user's self-perception in a pattern of pathologic use that leads to impaired social or occupational functioning.⁷ Substance abuse and chemical dependency are considered to represent points on a spectrum of unhealthy drug use, the latter condition characterized by compulsive use, associated personal/interpersonal dysfunction and the strong tendency to relapse. Drug addiction may be the consequence of an attempt to adapt to stress through habitual use of mood-altering drugs.

From the Division of Maternal-Fetal Medicine, Department of Obstetrics and Gynecology, University Medical Center, Jackson, MS.

Whether in the form of liquid as ethyl alcohol for oral intake, liquid as demerol for intravenous injection, powder as cocaine for sniffing or capsule as darvon or dilaudid for oral intake — *all* mood-altering substances function similarly at the cellular level in varying degrees to enable the chemically-dependent individual to satisfy her craving and cope with the anxiety associated with her chronic progressive disease of addiction.

Identification of gravidas who are either abusers of mood-altering substances or addicted individuals is difficult.⁸ Difficulties in patient recognition is one of the obstetrician's greatest concerns with this perinatal problem. Spickard has pointed out that physicians miss the diagnosis for a number of reasons which include inadequate education about and awareness of chemical dependency, the physician's attitude toward alcoholics and substance abusers, and denial on the part of the patient.⁵ As a group, drug-dependent gravidas are usually younger, often have a history of prior elective pregnancy termination and characteristically attend few if any prenatal clinics during gestation. The goal of the addicted/alcoholic mother is to conceal her addiction and to stay out of withdrawal pain often by obtaining medical analgesic treatment for an array of somatic complaints. Typically, she will strive to consume whatever mood-altering drugs that it takes and she can obtain in order to sustain her addiction and to remain comfortable. Although usually denying drug abuse, most chemically-dependent gravidas will admit to the use of more socially acceptable amounts of alcohol, caffeine and nicotine and often request by specific name a prescription for sleeping pills or favorite analgesics to allay chronic headaches or low back pain. Incorporation into prenatal care of a ten-question drinking history questionnaire such as that developed by Rosett can facilitate identification of gravidas who may be alcoholic.^{9, 10}

The many faces and forms of chemical dependency are mirrored in the varieties of clinical presentation which obstetricians witness in pregnant patients. A history of drug-associated diseases, such as hepatitis, bacterial endocarditis or cellulitis, is suggestive of intravenous drug abuse. Physical signs of intravenous drug use include constricted pupils, needle marks, thrombotic veins, subcutaneous abscesses or nodules, localized edema over superficial veins, unilateral lymphadenopathy, hepatomegaly and veins that are inaccessible for venipuncture. Bizarre behavior, a labile affect or poor attendance at prenatal care are red flags to diagnosis. Physical symptoms of advanced alcohol addiction include spider angiomas, a bulbous nose, liver palms, a red

ruddy complexion, an enlarged tender liver, and evidence of a peripheral neuropathy. Few or no abnormal physical findings, however, are the rule in gravidas who are dependent on orally-ingested psychotropic medications.

Although ethyl alcohol, tobacco, marijuana, and cocaine are currently the most widely publicized drugs of abuse or addiction, many other psychotropic drugs including sedatives, heroin or milder narcotics, hallucinogens, amphetamines, patient-prepared combination drugs such as "T's and blues" as well as scores of others are potential agents of drug dependency in disease-susceptible gravidas.^{2, 7, 11-19} Since drug history-taking is notoriously unhelpful and inaccurate, targeted toxicology testing is required to objectively confirm a suspicion of drug abuse.²⁰ Urine drug testing is helpful not only for initial confirmation of suspected drug abuse but also as a tool to monitor the status of pregnant patients thereafter because the nature of the disease is to deny its existence or at least to minimize its extent of progression. Certain drugs of potential abuse and addiction such as Stadol® require selective urine testing since they are not detected by the usual screening procedures. The retention times of psychotropic drugs and their metabolites in urine are highly variable, ranging from hours to weeks. Detection of very short-acting drugs with no urinary metabolites such as recent ethyl alcohol consumption requires blood sampling.

Perinatal psychotropic drug abuse and addiction confers a high-risk status upon the affected pregnancy. Significant associated maternal and fetal side effects occur which can reflect the type, timing and quantity of drug(s) used as well as their route of administration. Several excellent reviews of this area of complicated pregnancy management have been published recently.^{2, 7, 20-25} A summary of salient concerns for the practicing physician is presented.

Maternal Concerns

A 40% to 50% incidence of medical complications among drug-dependent women has been reported by Stern²⁶ and most frequently includes anemia, cardiac disease (endocarditis), phlebitis, cellulitis, hepatitis, hypertension, urinary tract infection and venereal diseases. Often poor nutritional status complicates the pregnancy. Although relatively infrequent, acute and subacute bacterial endocarditis is associated with significant maternal mortality because optimal prenatal care is usually avoided by the patient and the possibility of early treatment is missed. Kidney infection and pulmonary diseases including pulmonary edema and as-



(ciprofloxacin HCl/Miles)



A REVOLUTIONARY ORAL ANTIMICROBIAL WITH THE POWER OF PARENTERALS

- Highly active *in vitro* against a broad range of gram-positive and gram-negative pathogens, including methicillin-resistant *Staphylococcus aureus* and *Pseudomonas aeruginosa**
- For treatment of infections in the:
 - lower respiratory tract[†]
 - urinary tract[†]
 - skin/skin structure[†]
 - bones and joints[†]
- Convenient **B.I.D.** dosage – 250 mg, 500 mg and 750 mg tablets

**In vitro* activity does not necessarily imply a correlation with *in vivo* results.

[†]Due to susceptible strains of indicated pathogens. See indicated organisms in Brief Summary.

CIPRO® SHOULD NOT BE USED IN CHILDREN, ADOLESCENTS, OR PREGNANT WOMEN.

A history of hypersensitivity to ciprofloxacin is a contraindication to its use. A history of hypersensitivity to other quinolones may also contraindicate the use of ciprofloxacin.



Miles Inc.
Pharmaceutical Division
400 Morgan Lane
West Haven, CT 06516

Please see adjacent page of this advertisement for Brief Summary of Prescribing Information.

Cipro[®] TABLETS (ciprofloxacin HCl/Miles)

■ 500 mg q12h for most infections;
750 mg q12h for severe or complicated infections.

CIPRO[®]
(ciprofloxacin hydrochloride/Miles)
TABLETS

BRIEF SUMMARY CONSULT PACKAGE INSERT FOR FULL PRESCRIBING INFORMATION

INDICATIONS AND USAGE

Cipro[®] is indicated for the treatment of infections caused by susceptible strains of the designated microorganisms in the conditions listed below

Lower Respiratory Infections caused by *Escherichia coli*, *Klebsiella pneumoniae*, *Enterobacter cloacae*, *Proteus mirabilis*, *Pseudomonas aeruginosa*, *Haemophilus influenzae*, *Haemophilus parainfluenzae*, and *Streptococcus pneumoniae*

Skin and Skin Structure Infections caused by *Escherichia coli*, *Klebsiella pneumoniae*, *Enterobacter cloacae*, *Proteus mirabilis*, *Proteus vulgaris*, *Providencia stuartii*, *Morganella morganii*, *Citrobacter diversus*, *Citrobacter freundii*, *Pseudomonas aeruginosa*, *Staphylococcus aureus* (penicillinase and nonpenicillinase-producing strains), *Staphylococcus epidermidis*, and *Streptococcus pyogenes*

Bone and Joint Infections caused by *Enterobacter cloacae*, *Serratia marcescens*, and *Pseudomonas aeruginosa*

Urinary Tract Infections caused by *Escherichia coli*, *Klebsiella pneumoniae*, *Enterobacter cloacae*, *Serratia marcescens*, *Proteus mirabilis*, *Providencia rettgeri*, *Morganella morganii*, *Citrobacter diversus*, *Citrobacter freundii*, *Pseudomonas aeruginosa*, *Staphylococcus epidermidis*, and *Streptococcus faecalis*

Infectious Diarrhea caused by *Escherichia coli* (enterotoxigenic strains), *Campylobacter jejuni*, *Shigella flexneri*, and *Shigella sonnei** when antibacterial therapy is indicated

*Efficacy for this organism in this organ system was studied in fewer than 10 infections.

Appropriate culture and susceptibility tests should be performed before treatment in order to isolate and identify organisms causing infection and to determine their susceptibility to ciprofloxacin. Therapy with Cipro[®] may be initiated before results of these tests are known, once results become available appropriate therapy should be continued. As with other drugs, some strains of *Pseudomonas aeruginosa* may develop resistance fairly rapidly during treatment with ciprofloxacin. Culture and susceptibility testing performed periodically during therapy will provide information not only on the therapeutic effect of the antimicrobial agent but also on the possible emergence of bacterial resistance.

CONTRAINDICATIONS

A history of hypersensitivity to ciprofloxacin is a contraindication to its use. A history of hypersensitivity to other quinolones may also contraindicate the use of ciprofloxacin.

WARNINGS

CIPROFLOXACIN SHOULD NOT BE USED IN CHILDREN, ADOLESCENTS, OR PREGNANT WOMEN. The oral administration of ciprofloxacin caused lameness in immature dogs. Histopathological examination of the weight-bearing joints of these dogs revealed permanent lesions of the cartilage. Related drugs such as nalidixic acid, cinoxacin, and norfloxacin also produced erosions of cartilage of weight-bearing joints and other signs of arthropathy in immature animals of various species (SEE ANIMAL PHARMACOLOGY SECTION IN FULL PRESCRIBING INFORMATION).

PRECAUTIONS

General: As with other quinolones, ciprofloxacin may cause central nervous system (CNS) stimulation, which may lead to tremor, restlessness, lightheadedness, confusion, and very rarely to hallucinations or convulsive seizures. Therefore, ciprofloxacin should be used with caution in patients with known or suspected CNS disorders, such as severe cerebral arteriosclerosis or epilepsy, or other factors which predispose to seizures (SEE ADVERSE REACTIONS).

Quinolones may also cause anaphylactic reactions and cardiovascular collapse. Anaphylactic reactions may require epinephrine and other emergency measures.

Crystals of ciprofloxacin have been observed rarely in the urine of human subjects but more frequently in the urine of laboratory animals. Crystalluria related to ciprofloxacin has been reported only rarely in man, because human urine is usually acidic. Patients receiving ciprofloxacin should be well hydrated, and alkalinity of the urine should be avoided. The recommended daily dose should not be exceeded. Alteration of the dosage regimen is necessary for patients with impairment of renal function (SEE DOSAGE AND ADMINISTRATION SECTION IN FULL PRESCRIBING INFORMATION).

Drug Interactions: Concurrent administration of ciprofloxacin with theophylline may lead to elevated plasma concentrations of theophylline and prolongation of its elimination half-life. This may result in increased risk of theophylline-related adverse reactions. If concomitant use cannot be avoided, plasma levels of theophylline should be monitored and dosage adjustments made as appropriate.

Antacids containing magnesium hydroxide or aluminum hydroxide may interfere with the absorption of ciprofloxacin, resulting in serum and urine levels lower than desired; concurrent administration of these agents with ciprofloxacin should be avoided.

Probenecid interferes with the renal tubular secretion of ciprofloxacin and produces an increase in the level of ciprofloxacin in the serum. This should be considered if patients are receiving both drugs concomitantly.

As with other broad spectrum antibiotics, prolonged use of ciprofloxacin may result in overgrowth of nonsusceptible organisms. Repeated evaluation of the patient's condition and microbial susceptibility testing is essential. If superinfection occurs during therapy, appropriate measures should be taken.

Information for Patients: Patients should be advised that ciprofloxacin may be taken with or without meals. The preferred time of dosing is two hours after a meal. Patients should also be advised to drink fluids liberally and not take antacids containing magnesium or aluminum concomitantly or within two hours after dosing. Ciprofloxacin may cause dizziness or lightheadedness; therefore patients should know how they react to this drug before they operate an automobile or machinery or engage in activities requiring mental alertness or coordination.

Carcinogenesis, Mutagenesis, Impairment of Fertility: Eight *in vitro* mutagenicity tests have been conducted with ciprofloxacin and the test results are listed below.

- Salmonella/Microsome Test (Negative)
- E. coli* DNA Repair Assay (Negative)
- Mouse Lymphoma Cell Forward Mutation Assay (Positive)
- Chinese Hamster V₇₉ Cell HGPRT Test (Negative)
- Syrian Hamster Embryo Cell Transformation Assay (Negative)
- Saccharomyces cerevisiae* Point Mutation Assay (Negative)
- Saccharomyces cerevisiae* Mitotic Crossover and Gene Conversion Assay (Negative)
- Rat Hepatocyte DNA Repair Assay (Positive)

Thus, two of the eight tests were positive, but the following three *in vivo* test systems gave negative results:

- Rat Hepatocyte DNA Repair Assay
- Micronucleus Test (Mice)
- Dominant Lethal Test (Mice)

Long-term carcinogenicity studies in animals have not yet been completed.

Pregnancy - Pregnancy Category C: Reproduction studies have been performed in rats and mice at doses up to 5 times the usual daily human dose and have revealed no evidence of impaired fertility or harm to the fetus due to ciprofloxacin. In rabbits, as with most antimicrobial agents, ciprofloxacin (30 and 100 mg/kg orally) produced gastrointestinal disturbances resulting in maternal weight loss and an increased incidence of abortion. No teratogenicity was observed at either dose. After intravenous administration, at doses up to 20 mg/kg, no maternal toxicity was produced, and no embryotoxicity or teratogenicity was observed. There are, however, no adequate and well-controlled studies in pregnant women. SINCE CIPROFLOXACIN, LIKE OTHER DRUGS IN ITS CLASS, CAUSES ARTHROPATHY IN IMMATURE ANIMALS, IT SHOULD NOT BE USED IN PREGNANT WOMEN (SEE WARNINGS).

CONVENIENT B.I.D. DOSAGE

Recommended dosage schedule

Infection Site*	Severity of Infection	Dosage
Respiratory Tract*	Mild/Moderate	500 mg q12h
Bone and Joint*		
Skin/Skin Structure*	Severe/Complicated	750 mg q12h
Urinary Tract*	Mild/Moderate	250 mg q12h
	Severe/Complicated	500 mg q12h
Infectious Diarrhea*	Mild/Moderate/Severe	500 mg q12h

Nursing Mothers: It is not known whether ciprofloxacin is excreted in human milk, however, it is known that ciprofloxacin is excreted in the milk of lactating rats and that other drugs of this class are excreted in human milk. Because of this, and because of the potential for serious adverse reactions from ciprofloxacin in nursing infants, a decision should be made to discontinue nursing or to discontinue the drug, taking into account the importance of the drug to the mother.

Pediatric Use: Ciprofloxacin should not be used in children because it causes arthropathy in immature animals (SEE WARNINGS).

ADVERSE REACTIONS

Ciprofloxacin is generally well tolerated. During clinical investigation, 2,799 patients received 2,868 courses of the drug. Adverse events that were considered likely to be drug related occurred in 7.3% of courses, possibly related in 9.2%, and remotely related in 3.0%. Ciprofloxacin was discontinued because of an adverse event in 3.5% of courses, primarily involving the gastrointestinal system (1.5%), skin (0.6%), and central nervous system (0.4%).

The most frequently reported events, drug related or not, were nausea (5.2%), diarrhea (2.3%), vomiting (2.0%), abdominal pain/discomfort (1.7%), headache (1.2%), restlessness (1.1%), and rash (1.1%).

Additional events that occurred in less than 1% of ciprofloxacin courses are listed below. Those typical of quinolones are italicized.

GASTROINTESTINAL (See above), painful oral mucosa, oral candidiasis, dysphagia, intestinal perforation, gastrointestinal bleeding.

CENTRAL NERVOUS SYSTEM (See above), dizziness, lightheadedness, insomnia, nightmares, hallucinations, manic reaction, irritability, tremor, ataxia, convulsive seizures, lethargy, drowsiness, weakness, malaise, anorexia, phobia, depersonalization, depression, paresthesia.

SKIN/HYPERSENSITIVITY (See above), pruritus, urticaria, photosensitivity, flushing, fever, chills, angioedema, edema of the face, neck, lips, conjunctivae or hands, cutaneous candidiasis, hyperpigmentation, erythema nodosum.

Allergic reactions ranging from urticaria to anaphylactic reactions have been reported.

SPECIAL SENSES blurred vision, disturbed vision, (change in color perception, overbrightness of lights), decreased visual acuity, diplopia, eye pain, tinnitus, bad taste.

MUSCULOSKELETAL joint or back pain, joint stiffness, achiness, neck or chest pain, flare-up of gout, renal/urogenital interstitial nephritis, renal failure, polyuria, urinary retention, urethral bleeding, vaginitis, acidosis.

CARDIOVASCULAR palpitations, atrial flutter, ventricular ectopy, syncope, hypertension, angina pectoris, myocardial infarction, cardiopulmonary arrest, cerebral thrombosis.

RESPIRATORY epistaxis, laryngeal or pulmonary edema, hiccough, hemoptysis, dyspnea, bronchospasm, pulmonary embolism.

Most of these events were described as only mild or moderate in severity, abated soon after the drug was discontinued, and required no treatment.

In several instances, nausea, vomiting, tremor, restlessness, agitation, or palpitations were judged by investigators to be related to elevated plasma levels of theophylline possibly as a result of a drug interaction with ciprofloxacin.

Adverse Laboratory Changes: Changes in laboratory parameters listed as adverse events without regard to drug relationship.

Hepatic - Elevations of ALT (SGPT) (1.9%), AST (SGOT) (1.7%), alkaline phosphatase (0.8%), LDH (0.4%), serum bilirubin (0.3%).

Hematologic - eosinophilia (0.6%), leukopenia (0.4%), decreased blood platelets (0.1%), elevated blood platelets (0.1%), pancytopenia (0.1%).

Renal - Elevations of Serum creatinine (1.1%), BUN (0.9%).

CRYSTALLURIA, CYLINDRURIA, AND HEMATURIA HAVE BEEN REPORTED

Other changes occurring in less than 0.1% of courses were: Elevation of serum gamma-glutamyl transferase, elevation of serum amylase, reduction in blood glucose, elevated uric acid, decrease in hemoglobin, anemia, bleeding diathesis, increase in blood monocytes, and leukocytosis.

OVERDOSAGE

Information on overdosage in humans is not available. In the event of acute overdosage, the stomach should be emptied by inducing vomiting or by gastric lavage. The patient should be carefully observed and given supportive treatment. Adequate hydration must be maintained. In the event of serious toxic reactions from overdosage, hemodialysis or peritoneal dialysis may aid in the removal of ciprofloxacin from the body, particularly if renal function is compromised.

DOSAGE AND ADMINISTRATION

The usual adult dosage for patients with urinary tract infections is 250 mg every 12 hours. For patients with complicated infections caused by organisms not highly susceptible, 500 mg may be administered every 12 hours.

Respiratory tract infections, skin and skin structure infections, and bone and joint infections may be treated with 500 mg every 12 hours. For more severe or complicated infections, a dosage of 750 mg may be given every 12 hours.

The recommended dosage for infectious diarrhea is 500 mg every 12 hours.

In patients with renal impairment, some modification of dosage is recommended (SEE DOSAGE AND ADMINISTRATION SECTION IN FULL PRESCRIBING INFORMATION).

HOW SUPPLIED

Cipro[®] (ciprofloxacin HCl/Miles) is available as tablets of 250 mg, 500 mg, and 750 mg in bottles of 50, and in Unit Dose packages of 100 (SEE FULL PRESCRIBING INFORMATION FOR COMPLETE INFORMATION).

*Due to susceptible strains of indicated pathogens.
See indicated organisms in Prescribing Information.

For further information, contact the Miles Information Service:
1-800-642-4776. (In VA, call collect: 703-391-7888.)

COMMITTED TO THERAPEUTIC EFFICIENCY



Miles Inc.
Pharmaceutical Division
400 Morgan Lane
West Haven, CT 06516

piration pneumonia, bacterial pneumonia, foreign body emboli and granuloma with septic emboli are seen especially in drug-dependent gravidas who use intravenous routes of administration. Hepatitis is the most common infective complication of intravenous drug users (15%-18%).^{27, 28} In addition to syphilis and gonorrhea, acquired immune deficiency syndrome (AIDS) and its close relatives are diseases for which the chemically-abusing or addicted gravida is at high risk. Other potential infectious complications include tetanus with its high fatality rate and skin abscesses which are considered to be secondary to unsterile injection techniques. The potential risk of myocardial infarction from cocaine-induced vasospasm has been reported recently. Otherwise, the most feared maternal complication of drug addiction is death by overdose. It is apparent that the majority of maternal medical complications of parenteral drug abuse are not associated with the drug itself but with unsterile and contaminated injections. Regardless of route of drug administration, the economic necessities to support a drug habit by illegal means, secondary malnutrition and the usually associated unhealthy personal/family psychosocial environment further complicate maternal well-being and prenatal care.

Baby Concerns

The passenger in the pregnancy can also suffer adverse effects during the (a) preconceptual, (b) embryonic and (c) fetal stages of development. Although the resting oocyte in the female appears to be resistant to damage from environmental agents, it has been postulated that preconceptual psychotropic drug use in the male might impair spermatozoa to cause infertility and early reproductive loss.⁶ During the embryonic period which extends from the second to the eighth week after conception (first six weeks after last menstrual period), each organ system in the human embryo undergoes a sensitive stage in its development during which adverse influences can cause dysfunctional tissue organization with the formation of congenital anomalies. During the fetal period extending from nine weeks after conception until delivery (LMP \geq 7 weeks), the fetus has concluded organogenesis and therefore is less likely to develop congenital malformations after exposure to noxious agents. Instead, adverse fetal effects are expressed as altered skeletal growth/growth retardation, alteration of external genitalia, and central nervous system defects.

The most recently described potentially adverse fetal/neonatal effect of perinatal drug exposure has been termed behavioral teratology and it describes

behavioral and psychological disturbances expressed later in life by the affected neonate and child.²⁹⁻³¹ Although every fetus probably is affected in some way by maternal drug ingestion and related environmental factors, only 2% to 3% of all developmental defects in babies can be attributed to a specific drug or environmental etiologic agent.

Obstetric Concerns

There is no obstetric problem that is unique to the drug-addicted mother. Obstetric complications which have been frequently described in gestations with associated perinatal substance abuse and addiction include the following:

(1) *Low Birth Weight*. This is the most frequently reported general fetal response to maternal drug addiction. Various psychotropic drugs can variably affect fetal growth and development directly (decreased cell numbers, decreased growth factors) or indirectly (through adverse effects upon maternal nutrition).

(2) *Preterm Births and Labor* appear to be significantly increased in drug-abusing and addicted gravidas through primary and secondary mechanisms.

(3) *Intrauterine Acquired Infection* is often reported among offspring of addicted mothers and is believed to occur secondary to amnionitis, chorioamnionitis and preterm rupture of the membranes. Some maternal infections that are acquired as a consequence of a drug-abusing lifestyle are frequently transmitted to the fetus including syphilis, gonorrhea and AIDS.

(4) *Fetal Distress* in labor is frequently encountered with an increased incidence of meconium-stained fluid. Abruptio placenta and perinatal cerebral infarction associated with cocaine use have been reported.³²⁻³⁴ Also, intrauterine death can occur as a final complication of maternal narcotic withdrawal and its associated increase in baseline oxygen needs for the baby.³⁵

(5) Particularly in association with heavy early, continuous alcohol intake, *Central Nervous System Abnormalities* have been described including microcephaly, aberrant neonatal behavior, and attention deficit disorder with hyperactivity as well as mild to moderate mental retardation later in childhood. The effects of fetal neuropathy secondary to excessive alcohol or other drug ingestion such as cocaine during gestation can be either *immediate* and result in death or overt irreversible central nervous system impairment or *delayed* until later postnatal life.

(6) Other types of *Congenital Anomalies*, espe-

cially cardiac and renal, occur for instance as part of the spectrum of the fetal alcohol syndrome (FAS) and are termed alcohol-related birth defects. The full fetal alcohol syndrome (CNS abnormalities, growth retardation, and midfacial hypoplasia) probably occurs only in infants of women who suffer from well-advanced, chronic alcohol dependence or alcohol abuse and who continue to drink heavily and frequently throughout gestation.³⁶⁻⁴² It occurs in one in 300 to one in 1000 newborns and is probably the most frequent known cause of mental retardation.⁴³

Neonatal Concerns

Neonatal effects of perinatal drug abuse and addiction can be of severe consequence.^{23, 44-47} Neonatal death occurs more frequently among babies of addicted mothers (3% to 7% death rate) than among the general population. Neonatal withdrawal can occur either in an immediate (first 72 hours of life) or a delayed form 10 to 32 days following delivery, particularly among babies exposed to methadone. Sudden unexpected neonatal death (SIDS) is a phenomenon observed among babies of drug-addicted women. Finally, the later expression of central nervous system effects as behavioral or learning disorders and some degree of mental retardation is possible as mentioned previously. Environmental effects are difficult to separate from in utero effects and further study in this area is needed to more fully elucidate the impact of maternal chemical dependency on pregnancy and progeny.

Antepartum Care

A complete and comprehensive medical and drug history, especially with respect to all acknowledged drug use and abuse, is of prime importance in the management of these high-risk gravidas. A comprehensive physical examination and extensive laboratory diagnostic evaluations are indicated. In addition to routine prenatal evaluation, laboratory analyses should include screening for hepatitis, tuberculosis, gonorrhea, syphilis, AIDS, herpes, and urine for toxicology screens. Urine drug screens (or blood alcohol levels if appropriate) should be repeated routinely throughout the prenatal course to objectively evaluate the extent of maternal drug use and perinatal drug exposure. Because urine testing for pregnancy may give false-positive results in opiate-abusing women, serum beta-subunit hCG testing is indicated for pregnancy testing purposes.⁴⁸

In addition to the regular care that any prenatal patient receives, chemically-dependent gravidas require especially close attention with emphasis on

assessment of nutritional status and detection of occult venereal disease. If the patient will cooperate, an initial hospitalization of three or four days early in prenatal care facilitates assessment of her health status and degree of drug dependency.

The desire to detoxify every gravida should be resisted and instead individualized according to the primary drug of abuse and the stage of gestation.²⁰ Detoxification before 14 weeks of gestation is not advocated due to the theoretic risk of destabilizing the pregnancy and inducing abortion. Likewise, during the last trimester of pregnancy detoxification generally is not advised in view of its potential to provoke preterm labor or fetal distress. In general, hospitalization is required for any detoxification and consultation with an addictionologist if available is recommended. Withdrawal from alcohol can be effected over several days of hospitalization occasionally in association with small tapering doses of benzodiazepines or barbiturates to prevent delirium tremens several days into withdrawal. Withdrawal from sedative hypnotics and minor tranquilizers may be more prolonged due to slower drug clearance with consequent greater risk of withdrawal seizures and delirium later in treatment.

Whether to detoxify for narcotic analgesic dependency at any time during pregnancy has been a controversial issue and further investigation is needed.²⁰ Currently, patients are often switched to methadone maintenance during pregnancy to avoid the dangers of postdetoxification relapse and repeated intoxication and withdrawal cycles.⁴⁹⁻⁵² Later detoxification from methadone is usually effected over a period of one to three months with very slow decrements in dosage. Methadone maintenance for narcotic-addicted gravidas works by removing the patient from the drug-seeking environment, eliminating the necessary illicit behavior associated with this and preventing vacillations in maternal drug levels that would otherwise occur. Also, maternal nutrition appears to be improved in these patients and they are able to seek prenatal care and social/psychologic rehabilitation.

Regardless of whether perinatal chemical dependency is secondary to alcohol or any other mood-altering substance, it is critically important that a nonjudgmental multidisciplinary approach be taken for patient and pregnancy well-being. Gravidas should be encouraged to attend Alcoholics Anonymous and/or Narcotics Anonymous as an important support system for ongoing recovery. The patient should also be referred to a social worker or alcoholism counselor and others as needed within the medical care system itself to provide supportive

services. When agreed to by the gravida and if available in the local medical environment, residential stabilization is a strong component of optimal care for these gravidas in order to allow them to recover from their disease and to reconstruct their lifestyles with healthier ways of handling life stresses. Because this is a family disease with widespread obvious and subtle impact, arrangement for support of immediate family is important. Formally constituted inpatient or outpatient treatment centers often are ideally suited to assist the pregnant patient and her obstetrician to achieve immediate and long-term health for all parties.⁵³⁻⁵⁶

All gravidas should be followed at least bi-monthly to reassess fetoplacental and maternal well-being and to reassess alcohol or drug intake via blood and urine screening. An early second-trimester targeted ultrasound examination should be performed to rule out congenital anomalies and to provide a baseline measurement should fetal growth retardation become clinically evident at a later time in gestation. In the second trimester, frequent pelvic examinations may be indicated to detect evidence of preterm labor versus utilization of outpatient preterm labor detection devices. Antenatal fetal surveillance by means of nonstress and/or contraction stress testing for instance should be used liberally throughout the third trimester of pregnancy.

Labor and Delivery Concerns

With few exceptions, management of drug-dependent women during labor and delivery is similar to that for nondrug-dependent women.²⁴ Certain points, however, must be emphasized. The chemically-dependent gravida may have a high blood level of narcotics when admitted in labor due to self-treatment for withdrawal-like early labor symptoms or to compensate for the anticipated pain and stress of childbirth. Thus, it is recommended that the obstetrician obtain a urine drug screen on admission as well as a blood test for alcohol, if appropriate, in order to determine if any psychotropic drugs have been consumed in the recent past and to provide information for the pediatrician who will be responsible for treating possible neonatal withdrawal. If the gravida is maintained on methadone, her usual dose is administered as soon after admission as possible in order to avoid withdrawal during labor. In these laboring gravidas methadone is used only to prevent withdrawal and not to provide adequate analgesia. If withdrawal symptoms in labor are severe, a short-acting narcotic such as demerol is appropriate to administer systemically since methadone's onset of action is 30 to 60 minutes after

oral administration. The need to insert a subclavian intravenous line for vascular access (23% incidence in one series) is associated with a significant risk of pneumothorax.²⁴

The choice of anesthesia and analgesia for each patient is individually determined in a similar way as nonaddicted women. Narcotic analgesia in customary dosages and epidural anesthesia are recommended for pain relief during labor and delivery. Specifically contraindicated in these high-risk mothers and babies is agonist-antagonist combination drugs such as Stadol®, Nubain®, and Talwin® as well as narcotic antagonists such as naloxone (Narcan®) which can provoke severe withdrawal. General anesthesia is administered in the same manner as for nonaddicts/nonalcoholics. Expert neonatal assistance for the management of a potentially-depressed, distressed baby should be immediately available at the time of delivery and thereafter for the first few days of life as evidence for adverse fetal effects and SIDS is vigilantly sought. In the absence of fetal distress or compromise, immediate parental contact with the newborn infant in the delivery room is desirable as well as active participation by the woman and her spouse or another supporting family member during the labor and delivery process.

Postpartum Concerns

The postpartum course should be carefully monitored with length of stay dependent upon whether there are obstetric problems. The infant may need to stay longer, especially if withdrawal symptoms occur. In general, breastfeeding is encouraged unless the mother is HIV-positive or is still actively abusing multiple drugs. Social services consultation is recommended to evaluate the health of the home situation into which the mother and child will be moving.⁵⁷ Family planning needs must be individualized inasmuch as all currently available methods have drawbacks. Permanent sterilization, if desired, can be implemented prior to postpartum discharge. Transfer to an accredited alcohol and drug treatment center for further therapy can be considered.

Multidisciplinary Approach

Most successful programs which treat gravidas with chemical dependency have adapted existing prenatal and postnatal clinics to meet these patients' special needs. A team approach with representation from a variety of disciplines appears to be most successful in order to deal appropriately and sensitively with the comprehensive medical, psychosocial and addictive aspects of this chronic relapsing

SUBSTANCE ABUSE/Martin et al

disease. Careful medical monitoring is critically important in addition to patient education. The physician's role in this process extends beyond the simple provision of medical care because an understanding approach and skilled handling of the patient and her disease problem may have lasting impact. Emotional support for the gravida emphasizes her participation in prenatal care and does not mean support for the mother's drug use and its associated behaviors. The obstetrician can facilitate other treatment options for the chemically-dependent gravida by associated professionals who have extensive counseling experience in the treatment of addiction disorders. The need for long-term (life-long) treatment of the addiction beyond pregnancy is an important concept for the obstetrician to emphasize to the patient with particular emphasis upon the possibility of a normal outcome. How the physician communicates verbally has a lasting impact on the caring physician-patient relationship and can,

if very positive, have a lasting effect upon the recovery of this patient from this debilitating, destructive disease.

★★★

2500 North State Street (39216)

Acknowledgement

The author is grateful to Dr. Doyle P. Smith of Hattiesburg for his inspiration and able assistance as consultant to me and other obstetricians of the University of Mississippi Medical Center who manage gravidas with substance abuse and addiction.

References

1. Barnes DM: Drugs: Running the numbers. *Science* 240:1729-1731, 1988.
2. Mullins CL, Gazaway PM III: Alcohol and drug use in pregnancy: A case for management. *MMJ* 34:991-996, 1985.
3. Baum C, Kennedy DL, Forbes MB, et al: Drug use in the United States in 1981. *JAMA* 251:1293-1296, 1984.
4. Ogur B: Prescription drug abuse and dependence in clinical practice. *South Med J* 80:1153-1159, 1987.
5. Spickard A Jr: Alcoholism: The missed diagnosis. *South Med J* 79:1489-1492, 1986.
6. Hill LM, Kleinberg F: Effects of drugs and chemicals on the fetus and newborn. *Mayo Clin Proc* 59:707, 1984.
7. Finnegan LP, Wapner RJ: Narcotic addiction in pregnancy. In: Niebyl JR (ed.), *Drug Use in Pregnancy* (second edition). Philadelphia: Lea & Febiger, 1988:203-222.
8. Bodendorfer TW, Briggs GG, Gunning JE: Obtaining drug exposure histories during pregnancy. *Am J Obstet Gynecol* 135:490-494, 1979.
9. Rosett JL, Weiner L, et al: Treatment experience with pregnant problem drinkers. *JAMA* 249:2029, 1983.
10. Weiner L, Rosett HL, Edelin KC, Alpert JJ, Zuckerman B: Alcohol consumption by pregnant women. *Obstet Gynecol* 61:6-12, 1983.

JOURNAL MSMA policy prohibits publishing more than ten references. For a complete bibliography, please contact the author.

DOCTOR'S EXECUTIVE SET SPECIAL

500 Business Cards
500 Appointment Cards
500 Envelopes / 500 Letterheads

All printed on quality white paper with
black ink (Includes minimum typesetting) **\$79⁹⁹**

1000
ENVELOPES

#10 or
6³/₄ Regular White
24 lb. Envelopes

\$34⁹⁵

1000
6³/₄ BLUE
RETURN
ENVELOPES

\$29⁹⁵

Printed in Black Ink

Offer includes minimum typesetting / Window envelopes — Add 10%
All orders shipped U.P.S. or on our delivery trucks at no additional charge.

Steve Kowalski's

Northtowne Printers
3909 Northview Drive • Jackson, MS 39206
(601) 981-2675



The Disease of Chemical Dependency

DOYLE P. SMITH, M.D.

Hattiesburg, Mississippi

ALCOHOLISM AND OTHER DRUG ADDICTION is a disease of chemical dependency. To successfully treat the disease of chemical dependency one must first teach people the realities of addiction. Due to the great "conspiracy of silence" that has prevailed in regards to the acceptance of the disease and its treatment, there is a stigma that results in denial on the part of all society.

Highly Treatable and Susceptible to Control

This is a chronic, progressive, family disease that is never cured, but is highly treatable and susceptible to control very much like diabetes mellitus. This disease untreated is a *fatal disease!*

Psychiatric disorders may exist in a person with the disease of chemical dependency, whether it be alcoholism or other drug dependencies. These disorders are independent of the primary disease of chemical dependency except in a small minority of the cases; thus the disease of alcoholism and other drug addictions must be dealt with first.

In our modern society, we have alcohol and approximately 140 other mood-altering addictive substances. Why do people use these substances? The alcoholic or addict uses them because of a compulsive drive to try to get relief and achieve a pre-addictive normal feeling. The non-addicted person uses them because of peer pressure, experimentation to achieve euphoria and to get relief from anxiety, tension, pain and fatigue as dictated by society.

Skid-Row Located in The Mind

Not every alcoholic or drug dependent person is an unemployed, poverty stricken, skid-row bum. Many alcoholics sit in wall-to-wall carpeted offices. Any recovering alcoholic will tell you that skid-row

is located in the mind. This disease of chemical dependency is an equal opportunity affliction.

Alcoholism is an especially difficult disease to recognize and treat because it is by nature a hidden disease. The alcoholic is usually the last person in his or her family, or social circle to realize there is a problem. The individual can never see when he or she becomes addicted. Other people can see the change, but the denial system of the addicted person is so great that they can never accept it until they are at the bottom. Intervention is necessary for a person to get into treatment.

Cannot Reach Out for Help

The addicted person cannot effectively reach out for help. They many reach out, but in all sorts of unusual ways. The drug addict might subconsciously set himself up to get caught; an alcoholic will create a crisis, such as repeated disputes with partners and associates, as a way of reaching out. But the addicted person will feel guilty and, when confronted, will place blame and rationalize his or her behavior. The addicted person will start discharging the guilt in the form of, "Well, it's your fault . . . if you didn't do so and so, I wouldn't have a need to do this . . . I need a little peace of mind . . . I work hard and I need to relax." Rationalization on his part and the part of those around him keeps the problem hidden — sometimes until it has reached a serious stage.

There is no set cure for this disease. The change, or reconditioning, of a person's life is essential for the recovery process. Many factors are involved, including exercise, spiritual well-being, physical activities, total acceptance, self-honesty and resuming responsibility.

In summary, the principles of Alcoholics Anonymous are one of the major coping skills of recovery. ★★★

2255 Broadway Drive (39401)

Dr. Smith, a specialist in addictionology, is director of Pine Grove Recovery Center in Hattiesburg, Mississippi. Since 1978 he has served as director of the MSMA Impaired Physicians Program. He retired from that post in September.

**You're
a Professional.**

**You need Professional
Health Insurance
Coverage.**

MSMA

Benefit Plan and Trust

MSMA Benefit Plan and Trust is a superior insurance program which fulfills the quality of coverage and affordability that everyone wants.

Sponsored by the Mississippi State Medical Association, the MSMA Benefit Plan and Trust offers life and health benefits to physician members of MSMA, their employees and families.

- \$1,000,000 lifetime benefits.
- Life Coverage up to \$50,000.
- Broad benefits with fair and equitable rates.
- Management by and for physicians.
- Non-profit and administered at lowest possible cost.

For Complete Description of Benefits Write:

MSMA Benefit Plan and Trust

P.O. Box 55509
Jackson, MS 39216

MSMA Impaired Physicians Program: An Overview

ELLIS M. MOFFITT, M.D.

Jackson, Mississippi

IN 1954, THE AMERICAN MEDICAL ASSOCIATION recognized that alcoholism was a disease. However, development of intervention programs for impaired physicians stopped at that point until the Mental Health Committee of the AMA developed a Model Practice Act for State Licensure Boards. This was referred to the House of Delegates of the AMA where it was adopted in 1972. Three years later, the Mississippi Legislature adopted the Model Medical Practice Act, making Mississippi the first state to do so.

At that time, the State Board of Health was the licensure authority for the practice of medicine, and it was their investigators who saw the early need for alcohol treatment for physicians. The Medical Licensure Board could intervene only if a law was broken or in the case of unethical behavior or practice. Most of the controlled substances at the time were narcotics. The alcoholic physician was left to his own devices to obtain help as there was no organized program of assistance available. As a Medical Society we shunned these physicians, thus contributing to their problem by isolating them further. Seeing the need for help for physicians who had broken no law but were truly needing help, the Board of Health and the Mississippi State Medical Association urged the passage of the Model Medical Practice Act in 1975. This new law allowed the Board of Health to reach out and help physicians who were addicted.

About this same time, the Medical Association of Georgia was developing a program for physicians. My wife (Dr. Nina Goss-Moffitt) and I attended an AMA-sponsored Disabled Doctors Program in Atlanta where we heard a physician's presentation on the disease of alcoholism and the treatment program instituted by the Medical Association of Georgia. That program was under the

direction of Dr. G. Douglas Talbott, who was very helpful in getting the MSMA's program headed in the right direction.

After talking with Dr. Talbott and attending several seminars sponsored by the Medical Association of Georgia, Nina and I felt very strongly that Mississippi needed an MSMA-sponsored Disabled Doctors Program. Our approach was to get several local medical societies to sponsor a resolution to be presented to the House of Delegates in the spring of 1978. After receiving an overwhelming endorsement for this program from our own Central Medical Society, we went to Clarksdale where we made the same presentation and again received an overwhelming endorsement. The proposal then went to the House of Delegates where it was recognized as a much needed program and received recommendation for implementation. This was subsequently done.

The MSMA program is based on two major premises:

1. The disabled physician for psychological reasons is unable to reach out for help no matter how perilous his or her situation becomes.
2. Fellow physicians who would help the disabled physician must take the initiative, being careful to use a compassionate, non-judgmental, non-punitive approach.

The objectives of our program are:

1. Identify physicians who are disabled by reason of their addiction to, or abuse of, drugs, including alcohol.
2. Persuade as many of these physicians as possible to seek treatment voluntarily. During this process it is intended to protect the anonymity, not only of the physician, but also the physician's family.
3. Provide a practical and effective means of dealing with those physicians whose disability has

Dr. Moffitt is Director, MSMA Impaired Physicians Program, having accepted the appointment in September 1988.

been verified, but who either continue to deny their illness or refuse to complete a course of treatment. Here it is intended to protect the recalcitrant disabled physician, his or her family and patients, and the medical community against the irresponsible behavior which is characteristic of addiction.

The above objectives will be carried out by two MSMA Committees — the Physicians Consultant Committee and the Judicial Council (Ethics).

The primary role of the Physicians Consultant Committee is that of advocate of the impaired physician. The Committee is composed of rehabilitated physicians and other physicians interested in the disease of addiction. All members of the Committee are familiar with the characteristics of addictive disease and are prepared to confront and motivate the impaired physician.

The functions and responsibilities of the Physicians Consultant Committee include all the voluntary phases of the Mississippi State Medical Association's Disabled Physician Program, namely to:

1. Carry out an intensive statewide program of education about the nature of addiction and services offered by the Committee.
2. Establish identification of the disabled physician.
3. Create a trusting relationship with the disabled physician and that physician's family.
4. Motivate the disabled physician to seek and complete effective treatment.
5. Act as advocate of the disabled physician as needed in relationships with spouse, family, professional peers and in other areas of pressure.
6. Assist the impaired physician in planning for treatment, rehabilitation and subsequent re-entry into professional activities.
7. Provide moral support and practical aid to the disabled physician and his or her family from the time of identification through all ensuing steps of rehabilitation.

The MSMA Judicial Council is charged with enforcement and interpretation of the "Principles of Medical Ethics." In that capacity the primary role of the Council as related to the impaired physician is that of protector of the collective professional integrity of the medical community. The Council refers complaints of addiction to the Physicians Consultant Committee for verification and motivation toward voluntary treatment. Failing the ef-

forts of the Physicians Consultant Committee in this regard, the Judicial Council will make recommendations to the Mississippi Licensure Board concerning the status of the impaired physician. Recommendations of the Judicial Council will relate to the Mississippi Medical Practice Act dealing with the Disabled Physician Law which could require treatment or, if the physician would not comply, then revocation or suspension of the license to practice medicine because of addiction and/or mental and physical incapacity.

This brings us to the formation and the necessary outline to make the MSMA program work. In the beginning Nina and I traveled around the state advocating the program without a lot of obvious success. We desperately needed the assistance of a recovering physician who had been through the treatment program for physicians. It was Dr. Talbott who recommended someone — Dr. Doyle Smith. Since our program was patterned after the Georgia program, Dr. Smith was very familiar with it. He was an alumnus of the program, and after due thought and consultation with his wife Ruth and with Dr. Talbott, he consented to help. Doyle, Ruth, Nina and I began traveling around the state, explaining the program and what it could do for a chemically dependent physician. We had good initial response. There were a number of physicians who were in trouble with their medical staff privileges because of addiction. Many of their concerned colleagues, after hearing our story, asked us to help these physicians, and we intervened on these addicted physicians. After treatment, when these newly recovered physicians returned to their practice and began doing good work, they became advocates of our program. And when the non-chemically dependent physicians saw these newly recovered physicians return to the community and hospital staff and begin to practice good medicine again, they also became advocates of the program.

This describes the development of the MSMA program, which celebrated its tenth anniversary this spring. Mississippi physicians were the first professional group to institute a program for its profession. We feel good about the MSMA program. Although there have been very few modifications, we are constantly looking for new and better ways to complement what we have. More than 150 Mississippi physicians have been identified, treated and returned to the active practice of medicine. ★★★

940 North State Street (39201)



WE'RE ALWAYS ON CALL. 1-800-352-2226

Call the travel specialists toll-free!

When you come down with the urge or necessity to travel, call Avanti for expert service. Everything we do for you is free of charge, even the phone call.

Our travel specialists will take care of all your plans, plane reservations, car rental, hotel accommodations and much more. We're here to help you with charters, tours, cruises, personal vacations, business meetings and conventions.

The next time you make travel arrangements, remember Avanti is always on call, toll-free.

AVANTI
TRAVEL, INC.

Three Lakeland Circle • Jackson, Mississippi 39216 • 981-9111
Call Toll-Free Nationwide 1-800-327-4236



THE PRESIDENT'S PAGE

DAVID R. STECKLER, M.D.

“We Care Day” in Jackson

On January 18, 1989 you will have an opportunity to demonstrate your concern about two important medical issues. They are medical tort reform and care of the medically needy. In recognition of the adverse effect these issues are having on our patients' access to health services we have designated January 18, 1989 as “We Care Day” in Jackson.

On that day our MSMA House of Delegates will meet in Jackson to memorialize the Mississippi Legislature to address these issues. In addition you will be asked to personally deliver and discuss this action with your local legislators as they meet at the Capitol. We will be assisted in this effort by our MSMA Auxiliary. Official bodies and the membership of the MS Hospital Association, the MS Association of Hospital Governing Boards and the MHA Organization of Nurse Executives will also meet concurrently to address medical tort reform and care of the medically needy and to meet with legislators.

You will receive a special mailing in December about “We Care Day” in Jackson. You will be asked to indicate your plans to be in Jackson on January 18, 1989. The success of our efforts for medical tort reform and the care of the medically needy will depend on your participation. Block out January 18, 1989 on your calendar now. I look forward to seeing you in Jackson on “We Care Day.”

Charity Hospitals

It seems that most of the appeals to save the state charity hospitals come from sources who have an economic interest in their survival, which might include the Meridian Chamber of Commerce whose representative recently had a letter to the editor in the *Clarion Ledger* (October 27, 1988). It is quite true that these institutions provide jobs and payrolls that boost the economy of communities in which they are located. Perhaps, in addition, the availability of charity hospitals relieves private physicians and private hospitals of responsibility to care for patients who are perceived as undesirable because of their economic or social status. Also, it is true that there are many patients taken care of by these facilities that are not covered by Medicaid or any other alternative health care method. It is also true that many patients have depended on these facilities for their primary entrance into the medical care system for many years and, because of multiple reasons, some of these individuals may not be willing to seek needed health care at other facilities initially.

However, without belaboring the point, it should be noted that only three cities in Mississippi have charity hospitals. Also, there appears to be no interest or activity in the direction of constructing any new facilities in other communities that lack such a facility.

Also, it should be noted that no apparent or appreciable damage was done to the health care delivery system a few years ago when the charity hospital in Natchez was closed. There was, at that time, some anxiety concerning the plight of patients that were cared for at that charity facility. However, apparently no adverse health care outcomes could be traced to the closing of the Natchez facility.

Activity and attention ought to be directed to the issue of quality and accessibility of health care for

medically indigent citizens throughout the state instead of parochial economic concerns. The concept of a dual system of care for those who pay and those who can't has largely been rejected by the American public. Anyone who supports continuation of charity hospitals, in fairness, should advocate that these institutions be upgraded to a level of comparability with private hospitals, and should push for construction of new facilities to achieve fair geographic distribution.

In truth, the charity hospitals are underfunded, poorly equipped, and relatively inadequately staffed. For example, many physicians who practice in these hospitals do not qualify for an unrestricted license to practice medicine in Mississippi, which is required for all doctors who practice in private offices and other hospitals. Therefore, the development of a comprehensive high quality charity hospital system for Mississippi is an unrealistic goal because of cost.

Other mechanisms must be developed to serve the health care needs of medically needy citizens. The necessity to move ahead with such plans is urgent both from an economic and humanitarian standpoint. A case in point is the fact that some \$200,000,000 per year of federal matching funds has been passed up in recent years because of failure to fully utilize the Medicaid program to fund the care for needy citizens.

To this end, Governor Mabus has appointed a Special Committee on Indigent Health Care in Mississippi. The charge of this committee is to undertake an overview of indigent health care, with a special emphasis on quality and access to care. It is hoped that the result will be progressive and innovative recommendations for our legislature and our state health agencies.

J. EDWARD HILL, M.D.
Hollandale, MS

BOOK REVIEW

Jury of my Peers. Howard C. Snider, Jr., M.D.; Greenwood, Florida: The Penkevill Publishing Company, 1988; \$25.00.

In today's litigious climate it is probably safe to say that the vast majority of physicians have given some thought to the possibility, if not the probability, that they themselves will become the target of a medical malpractice lawsuit prior to the end of their professional careers. If so, some questions may arise: What may one expect? What are the defendant's emotional reactions? What motivations are behind the filing and the pursuing of such cases? How does our civil justice system work? Is the current system consistently fair to all parties concerned or is a change in the system, as presently contemplated by the American Medical Association, worthy of consideration in an effort to better ensure justice for all concerned? Dr. Snider takes a look at these questions based upon his personal experience.

The author, a well trained general surgeon who

practices in Montgomery, Alabama, was sued, along with one of his partners, for alleged medical malpractice. The summons was served one day before the statute of limitations would have expired. And, to quote Dr. Snider, "the summons marked the beginning of a pilgrimage I was to take through the inner working of our legal system — a pilgrimage that would leave me disillusioned and discouraged."

Dr. Snider, in a well written, easy to read book of 292 pages takes the reader along as he analyzes his own experience from the time the summons was served through the end of the trial. Our conclusion was that he attempted to do this in a candid, objective fashion, and we think he succeeded. It has been said that "fear of the unknown" explains many reactions that physicians have to being sued for malpractice. Dr. Snider has given us much insight into the "unknown" aspects of this equation as he evaluates the activities and motivations of those involved in this real life drama.

This book is recommended reading.

C. G. SUTHERLAND, M.D.

Medical Director

Medical Assurance Company
of Mississippi

Don't Miss "WE CARE DAY" in Jackson!!

January 18, 1989

- Special session of the MSMA House of Delegates to address two issues affecting your patients' access to health care
- Legislative information sessions on (1) care of the medically needy and (2) medical tort reform
- Meetings with legislators at the Capitol
- Reception with legislators at Ramada Renaissance

Sponsored by: Mississippi State Medical Association
Mississippi Hospital Association
Mississippi Association of Hospital Governing Boards
Mississippi Organization of Nurse Executives

Please join us to demonstrate *your* concern for your profession
and your patients. We can make a difference!!

MEDICAL ORGANIZATION

"We Care Day" Will Focus On Medical Legislation

A massive demonstration of professional concern about two issues affecting access to health care in Mississippi is planned for January 18, 1989 in Jackson. The day has been designated "We Care Day."

On that date, MSMA and MSMA Auxiliary members are urged to join with hospital administrators, nurses and other concerned citizens to memorialize the legislature to act on bills dealing with

medical tort reform and care of the medically needy.

"We Care Day" is sponsored by the MSMA, the Mississippi Hospital Association, the Mississippi Association of Hospital Governing Boards, and the Mississippi Organization of Nurse Executives.

The day will begin with special sessions of the official bodies of the sponsoring organizations, including the MSMA House of Delegates. Participants will then be transported to the State Capitol to meet with legislators to supply information about the issues and discuss recommended actions. The day will conclude with an evening reception at the Ramada Renaissance.

MSMA members are encouraged to make arrangements now to be in Jackson for this special legislative effort.

Thoracic Society Conducts Annual Meeting in Jackson



The annual Boswell Lecture and the Mississippi Thoracic Society scientific/business meeting were held recently at the Veterans Administration Medical Center in Jackson. Guest speaker Hans E. Einstein, M.D., second from right, Professor of Clinical Medicine, University of Southern California School of Medicine at Los Angeles and Clinical Professor of Medicine, California State College at Bakersfield, is pictured with Mississippi Thoracic Society officers. From left are: Charles J. Parkman, M.D., Hattiesburg, Mississippi Thoracic Society's Representative Councilor to the American Thoracic Society;

J. Keith Mansel, M.D., Jackson, MTS secretary/treasurer; James E. Griffith, M.D., Jackson, outgoing MTS president; Hugh A. Gamble, M.D., Greenville, MTS vice-president; Dr. Einstein; and William C. Kellum, M.D., Tupelo, newly elected MTS president. The annual MTS meeting and the Boswell Lecture are sponsored by the Mississippi Lung Association; its medical arm, the Mississippi Thoracic Society; the University of Mississippi School of Medicine Department of Pulmonary Division and the University Medical Center Division of Continuing Health Professional Education.

Season's Greetings

from the
MSMA Auxiliary on behalf of the AMA-ERA



Mrs. Doyle Smith (Ruth) — 1988-89 President
Mrs. George E. Abraham, II (Ginny)
Mrs. Timothy Alford (Mary Al)
Mrs. T. A. Baines (Corinne)
Mrs. George Ball (Martha)
Mrs. Jim C. Barnett (Roberta)
Mrs. John Beaman (Sandra)
Mrs. Terrell D. Blanton (Barbara)
Mrs. Walter Bourland (Tommie)
Mrs. P. B. Brumby (Lynda)
Mrs. Curtis W. Caine, Sr., (Lynn)
Mrs. Guy Campbell (Margaret)
Mrs. Benjamin Carmichael (Kathy)
Mrs. Richard H. Clark (Helen)
Columbia Medical Auxiliary
Mrs. Milam Cotten (Betty)
Mrs. Dewitt Crawford (Peggy)
Mrs. Moncure Dabney (Betty)
Mrs. J. G. Dees (Opal)
Mrs. Roy D. Duncan (Lynn)
Mrs. Ed Egger (Ann)
Mrs. George Ellis (Karen)
Mrs. John Estess (Dottie)
Mrs. Carl G. Evers (Jan)
Mrs. William Fellows (Gini)
Mrs. William Ford (Jane)
Mrs. J. Hurd Gaddy (Denise)
Mrs. Harry Gibson (Mynette)
Mrs. Hilton Gillespie, Jr., (Kim)
Mrs. Gary Groff (Cathy)
Mrs. Eric Hale (Mary)
Mrs. Stanley Hartness (Beth)
Mrs. Joe Herrington (Peggie)

Mrs. J. Edward Hill (Jean)
Mrs. Stanley A. Hill (Alice)
Mrs. Donald A. Hopkins (Cindy)
Mrs. William C. Hopper (Anne)
Mrs. Hugh H. Johnston, Sr. (Hazel)
Mrs. Eric Lindstrom (Nancy)
Mrs. Charles Lobrano (Sandra)
Mrs. Ben Martin (Linda)
Mrs. Ellis Moffitt (Nina)
Mrs. Norman C. Nelson (Annie Lee)
Mrs. J. Elmer Nix (Rosemary)
Mrs. David M. Owen (Sara Ann)
Mrs. Charles Parkman (Lucy)
Mrs. William H. Preston, Jr. (Jane)
Mrs. Dan Reikes (Anita)
Mrs. Curtis Roberts (Betty)
Mrs. Joseph Rogers (Carolyn)
Mrs. Lee Rogers (Merrell)
Mrs. G. Samuel Rowlett, Jr. (Sue)
Mrs. Dale Russwurm (Teresa)
Mrs. George V. Smith (Annie)
Mrs. J. George Smith (Mary Elizabeth)
Mrs. David Steckler (Dale)
Mrs. David B. Stephens (Karen)
Mrs. Luther Stumme (Kathy)
Mrs. A. T. Tatum (Martha)
Mrs. Brian Venters (Jean)
Mrs. James Wailes (Jo)
Mrs. Louise Avent Waterman
Mrs. Clarence H. Webb, Jr. (Binny)
Mrs. Henry H. Webb (Barbara)
Mrs. Lamar Weems (Nanette)
Mrs. Milton R. York (Adele)

PERSONALS

GEORGE E. ABRAHAM of Vicksburg spoke at a continuing education seminar at the Scientific Assembly of the American Academy of Family Physicians in New Orleans.

JAMES C. BARNETT of Brookhaven has been elected vice president of Southern Medical Association.

PAT BARRETT of Jackson conducted a scoliosis workshop in McComb for members of the Junior Auxiliary as preparation for the auxiliary's scoliosis screening project in area schools.

CHARLES P. BASS of Columbia has been recertified as a diplomate of the American Board of Family Practice.

CHRIS H. BENSON of Hattiesburg spoke at a continuing medical education seminar at Forrest General Hospital.

SANDRA BURFORD of Vicksburg has been certified as a diplomate of the American Board of Family Practice.

JOHN BURK of Tupelo received the Meritorious Service Award presented by the Northeast Mississippi Chapter of the American Diabetes Association, Mississippi Affiliate.

JOHN D. CHAPMAN of Yazoo City has been elected president of Delta Medical Society.

BRYAN COWAN of UMC lectured at Providence Hospital in Southfield, Michigan.

SAM CREEKMORE of New Albany has been recertified by the American Academy of Family Physicians.

OWEN EVANS of UMC lectured at the University of Rochester (New York) Medical Center.

JAMES C. GRAHAM of Enterprise has been named a fellow of the American Academy of Family Physicians.

WAYNE HESS of UMC gave a presentation at a meeting of the Central Association of Obstetrics and Gynecology in Salt Lake City.

ROBERT HIGGINS of Jackson has been certified by the American Board of Orthopaedic Surgery.

J. EDWARD HILL of Hollandale has been appointed Councilor for Mississippi for the Southern Medical Association.

DAVID I. HIRSCH has associated with the Hattiesburg Clinic, 415 South 28th Avenue, for the practice of nephrology.

JAMES HUGHES of UMC taught an ASIF course in Orlando, Florida, and was guest lecturer at Bowman Gray in Winston-Salem, North Carolina.

WILLIAM KAHLSTORF of Tupelo spoke on "Becoming an Askable Parent" at a sex education seminar sponsored by North Mississippi Medical Center and its Teen Pregnancy Prevention Task Force.

SHERRY MARTIN of Hattiesburg was speaker at a continuing medical education course at Forrest General Hospital.

CLYDE RAY MCCLAURIN of Canton has been recertified for membership in the American Academy of Family Physicians.

W. H. MERRELL, JR. of Jackson has been selected as the Special Assistant to the Surgeon General of the Army for the Army National Guard. The assignment carries the rank of Major General. He is

A Commitment to Excellence in Health Care

Mississippi Emergency Association, P.A. (MEA) a physician-owned and managed group has created an environment for physicians that promotes the ideals of private practice while freeing doctors from the administrative and financial demands of the private practitioner.

Board certified or board eligible physicians in the area of Emergency Medicine, Internal Medicine, and Family Medicine are presented a variety of professional and personal rewards, including excellent salaries, benefits, and advancement opportunities.

MEA is a dynamic, growing corporation that delivers quality health care. If you would like to know what career opportunities we can offer you, send your curriculum vitae to Sheila M. Stringer or call (601) 366-6503.

**Mississippi Emergency
Association, P.A.
P.O. Box 12917
Jackson, MS 39236-2917**

PERSONALS/Continued

assigned to the Mississippi Army National Guard and will continue his full-time practice with the Mississippi Urology Clinic.

WILLIAM C. NICHOLAS of UMC made presentations on thyroid disease at meeting of family physicians in Greenwood and at a geriatric symposium in Corinth.

HOWARD NICHOLS of UMC was examiner for the American Board of Pediatrics in Boston, Massachusetts.

WILLIAM PACE of Hattiesburg spoke on "Alcohol, Pregnancy and Health" at a symposium co-sponsored by Methodist Hospital of Hattiesburg (Women's Health Services) and University of Southern Mississippi's Alcohol Awareness Task Force.

JEANNETTE PULLEN of UMC chaired the ALL committee of the Pediatric Oncology Group in Memphis.

SESHADRI RAJU of UMC made a presentation at a geriatric seminar in Corinth.

ROBERT RHODES of UMC made a presentation at a meeting in Newport Beach, California of the American Association for the Surgery of Trauma.

LINDA ROCKHOLD of Jackson was speaker at a meeting at Hinds General Hospital of the Interstitial Cystitis Support Group.

PHILIP SACCOCCIA, JR. of Gulfport was elected president of the Mississippi Association of Pathologists.

JOSEPH SIEFKER of Meridian was speaker at a meeting of the Newton Rotarians.

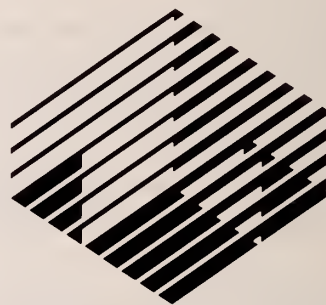
C. RANDLE VOYLES of Jackson made a presentation on management of carcinoma of the bile duct at a meeting in Nice, France of the International Hepatobiliary Association.

THAD WAITES of Hattiesburg was speaker at a continuing medical education seminar at Forrest General Hospital.

JOHN J. WHITE of Jackson was program chairman of a recent meeting of the Flying Physicians Association in Gatlinburg, Tennessee.

PSYCHIATRIST NEEDED

The Mississippi Department of Corrections is seeking to acquire the services of a Licensed Psychiatrist to work in the correctional system. The psychiatrist would be required to provide and supervise treatment for a population of chronically mentally ill offenders. Consultations with other physicians and psychological staff would occur primarily at the Mississippi Department of Corrections Hospital. Duties of the position also require psychiatrist to conduct psychiatric evaluations of sex offenders eligible for parole and perhaps to initiate in providing treatment services for this population as well. Salary is negotiable depending upon qualifications and experiences: *\$90,000 PLUS, forty-hour week, no call, and strong compensation package.* For additional information, contact W. E. Steiger, Administrator, Mississippi Department of Corrections Medical/Dental Facility, P.O. Box E, Parchman, MS 38738. Call (601) 745-6611 Ext. 631.



**We earn
your trust every day.™**

 **Trustmark™**
National Bank

Jackson/Bogue Chitto/Brookhaven/Canton/Clinton/Columbia
Georgetown/Gretna/Greenville/Greenwood/Hattiesburg/Hazlehurst
Leland/Liberty/Madison/Magee/McComb/Pearl/Petal/Ridgeland
Tylertown/Wesson

Member FDIC



ALLAN J. HAMILTON, M.D.

Neurosurgical Resident and Research Fellow,
Massachusetts General Hospital, Boston, Massachusetts.
Captain, U.S. Army Reserve.

EDUCATION Ithaca College, B.A. (Magna Cum Laude);
Hamilton College (Pre-med); Harvard Medical School.

RESIDENCY General Surgical Internship. Neurosurgical
Residency, Massachusetts General Hospital.

CONTINUING EDUCATION Neurology and Neuro-
surgery Research Fellowship Training, National Institutes
of Health.

OUTSTANDING ACHIEVEMENTS Olsen Memorial
Fellowship, National Masonic Medical Research Foundation;
Albert Schweitzer Fellowship, International Albert Schweitzer
Foundation; Harvard Medical School Cabot Prize for Best
Senior Thesis; recently published article, "Who Shall Live
and Who Shall Die" in Newsweek Magazine.

“The work I’m doing in the Army Reserve fits perfectly with my academic research interests in civilian life. The Army is very concerned with the effects of high-altitude cerebral edema, which is a mirror model of cerebral hypoxia, something I deal with every day in our neurosurgical intensive care unit. I couldn’t ask for a smoother transition. And that’s true for a lot of Reserve physicians. All we really do is change our clothes, not our mindset.

“Some of the projects the Army is undertaking are on the cutting edge of research. For example, I’m currently involved in developing for the Army a prototype of a non-invasive intracranial pressure-monitoring device that we hope will allow us to measure pressure changes as the brain swells—without drilling holes in the skull. If we can get our design to work, such a device could revolutionize high-altitude medicine as well as civilian neurosurgical care.

“The quality of medicine and the caliber of people I’ve been associated with in the Army Reserve are, without question, equal to civilian hospitals. In fact, I’m giving serious consideration to applying for an active duty academic position in Army Medicine when my residency ends at Massachusetts General.”

Find out more about the medical opportunities in the Army Reserve. Call toll free 1-800-USA-ARMY.



Soldier being examined for effects of high-altitude cerebral edema.

**ARMY RESERVE MEDICINE.
BE ALL YOU CAN BE.**

THE LOWER RESPIRATORY TRACT— More vulnerable to infection in smokers and older adults



Experience counts

Ceclor[®] Pulvules[®]
250 mg
cefaclor

think of it first

For respiratory tract infections due to susceptible strains of indicated organisms.

Summary.

Consult the package literature for prescribing information.

Indication: Lower respiratory infections, including pneumonia, caused by *Streptococcus pneumoniae*, *Haemophilus influenzae*, and *Streptococcus pyogenes* (group A β -hemolytic streptococci).

Contraindication: Known allergy to cephalosporins

Warnings: CECLOR SHOULD BE ADMINISTERED CAUTIOUSLY TO PENICILLIN-SENSITIVE PATIENTS. PENICILLINS AND CEPHALOSPORINS SHOW PARTIAL CROSS-ALLERGENICITY. POSSIBLE REACTIONS INCLUDE ANAPHYLAXIS.

Administer cautiously to allergic patients.

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics. It must be considered in differential diagnosis of antibiotic-associated diarrhea. Colon flora is altered by broad-spectrum antibiotic treatment, possibly resulting in antibiotic-associated colitis.

Precautions:

- Discontinue Ceclor in the event of allergic reactions to it.
- Prolonged use may result in overgrowth of nonsusceptible organisms.
- Positive direct Coombs' tests have been reported during treatment with cephalosporins.
- Ceclor should be administered with caution in the presence of markedly impaired renal function. Although dosage adjustments in

moderate to severe renal impairment are usually not required, careful clinical observation and laboratory studies should be made.

- Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.
- Safety and effectiveness have not been determined in pregnancy, lactation, and infants less than one month old. Ceclor penetrates mother's milk. Exercise caution in prescribing for these patients.

Adverse Reactions: (percentage of patients)

Therapy-related adverse reactions are uncommon. Those reported include:

- Gastrointestinal (mostly diarrhea): 2.5%
- Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment.
- Hypersensitivity reactions (including morbilliform eruptions, pruritus, urticaria, and serum-sickness-like reactions that have included erythema multiforme [rarely, Stevens-Johnson syndrome] and toxic epidermal necrolysis or the above skin manifestations accompanied by arthritis/arthritis, and frequently, fever). 1.5%, usually subside within a few days after cessation of therapy. Serum-sickness-like reactions have been reported more frequently in children than in adults and have usually occurred during or following a second course of therapy with Ceclor. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.

- Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.
 - As with some penicillins and some other cephalosporins, transient hepatitis and cholestatic jaundice have been reported rarely.
 - Rarely, reversible hyperactivity, nervousness, insomnia, confusion, hypertonía, dizziness, and somnolence have been reported.
 - Other: eosinophilia, 2%; genital pruritus or vaginitis, less than 1%, and, rarely, thrombocytopenia.
- Abnormalities in laboratory results of uncertain etiology**
- Slight elevations in hepatic enzymes.
 - Transient fluctuations in leukocyte count (especially in infants and children).
 - Abnormal urinalysis, elevations in BUN or serum creatinine.
 - Positive direct Coombs' test.
 - False-positive tests for urinary glucose with Benedict's or Fehling's solution and Clinitest[®] tablets but not with Tes-Tape[®] (glucose enzymatic test strip, Lilly).

(061088L)

Additional information available from
Eli Lilly and Company, Indianapolis, Indiana 46285



Eli Lilly Industries, Inc.
Carolina, Puerto Rico 00630

INDEX VOLUME XXIX

January-December, 1988

SUBJECT INDEX

The letters used to explain in which department the matter indexed appears are as follows: "A," Abstract; "E," Editorial; "N," News; "L," Letters to the Editor; "PP," President's Page; "RS," Radiologic Seminar; "BR," Book Review; "MLB," Medico-Legal Brief; "AP," Auxiliary Page; "C," Comment; "S," Special Article; the asterisk (*) indicates an original article

in the Journal, and the author's name follows the entry in brackets. "Deaths," "Personals," and "New Members" are indexed under the letters "D," "P," and "M" respectively.

Matter pertaining to MSMA is indexed under "Mississippi State Medical Association."

A

Abortion

federal court enjoins regulations that bar abortion counseling, 313-MLB

Acne

about . . . face! [Johnston] 313-E

Acquired Immune Deficiency Syndrome (AIDS)
AIDS crisis challenges medical profession [Lockey] 19-E

AIDS in the workplace [Causey] *11
incidence of AIDS and prevalence of HIV in Mississippi [Thompson] *3

MSMA policy statement on AIDS, S-11
testing for HIV infection [Wofford] *8
transmission of human immunodeficiency virus infection [McVey] *1

Alcoholism

alcoholism: making the diagnosis in your practice [Milhorn] *363

MSMA Impaired Physicians Program: an overview [Moffitt] *377

the disease of chemical dependency [Smith] *375
vets disabled by alcoholism not entitled to time extension for educational benefits, 273-MLB

American College of Allergists

names R. Faser Triplett as president, 22-N

American Medical Association

AMA membership equals dollars and sense [Steckler] 346-PP

MSMA delegation recognized for AMA membership recruitment, 348-N

American Medical Association Auxiliary

Jean Hill named president-elect, 209-N

Auxiliary to MSMA

announces 65th Annual Session plans, 153-N
delegation to AMAA annual session pictured, 277-N
Jean Hill named president-elect of AMAA, 209-N
supports children's cancer clinic, 89-N

B

Bell, Warren

honored by University Medical Center, 118-N

Blue Cross-Blue Shield of Mississippi, Inc.

letter objects to "key physician" program [Pennington et al], 314-L

Books Reviewed

Jury of My Peers [Sutherland] *382-BR

Neuroanatomy: An Atlas of Structures, Sections and Systems [Tipton] 314-BR

Neurology: Problems in Primary Care [Tipton] 274-BR

Bone

the use of allografts in anterior cervical interbody fusion [Frothingham and Solomon] *71

Breast

the relationship of fibrocystic disease to breast carcinoma [Gibson] *137

C

Campbell, Guy D.

honored by Mississippi Lung Association, 209-N

Cancer

cancer prevention: national directions, local realities [Phillips et al] *101

effective palliation of metastatic adenocarcinoma to the liver: a case report [Smith et al] *301

MSMA auxiliary supports children's cancer clinic, 89-N

surgical management of small cell lung cancer: a case report [Graham et al] *169

Cardiology

late left ventricular function following angioplasty in acute myocardial infarction [Waites and Genton] *223

right ventricular myocardial infarction [Atkinson] *297
peripartum cardiomyopathy: a case report [Beebe and Gearhart] *67

Cobb, Alton B.

recognized for efforts toward maternal, child health, 278-N

Central Medical Society

hears Congressman Dowdy, 22-N

honors Dr. James D. Hardy, 22-N

Chemical Dependency

alcoholism: making the diagnosis in your practice [Milhorn] *363

MSMA Impaired Physicians Program: an overview [Moffitt] *377

pregnancy-associated substance abuse and addiction: current concepts and management [Martin et al] *369

the disease of chemical dependency [Smith] *375

Chiropractors

new trial for malpractice suit against chiropractor, 65-MLB

Computed Tomography (CT)

herpes simplex encephalitis: CT findings [Gates and Morano] 109-RS

Chylothorax

chylothorax [Defore] *191

D

Deaths

Bailey, S. Lamar, 329

Easterly, Clay E., 161

Folk, Benjamin P., Jr., 161

Goetz, Catherine G., 161

Goode, Paul E., 161

Hand, Benjamin F., 122

Hightower, Jesse R., 33

Justice, T. T., Jr., 161

Kuljis, Joseph, 161

McGehee, Joseph C., 329

Mutziger, Dudley H., 329

Newton, Michael, 210-N

Person, Milton T., Jr., 33

Phillips, Herbert S., 329

Shaheen, Michael, 122

Thompson, Charles C., 359

Waldron, Willard L., 189

Webb, Lester D., 122

Wilson, David B., 357

Drug Abuse (see Chemical Dependency)

Dysmenorrhea

treatment of primary dysmenorrhea with flurbiprofen [Gookin et al] *106

E

Ear

the miniature battery: a new foreign body hazard [Cannon] *41

Encephalitis

herpes simplex encephalitis: CT findings [Gates and Morano] *109

Epiglottitis

role of radiographic evaluation in epiglottitis [Turner and Blumenthal] 43-RS

F

Fitness

physicians as role models [Johnston] 51-E

H

Hardy, James D.

honored by Central Medical Society, 22-N

Head

growing skull fractures of childhood [Deschamps and Blumenthal] 16-RS

Health Care

a fairy tale [Cook] 201-S

"We Care Day" [Steckler] 380-PP

Health Care Costs

letter discusses cost issues [Hatten] 52-L

Health Education

physician support sought for school health curriculum [Hill] 85-E

final report and recommendations of Mississippi's health curriculum committee, 79-S

Health Insurance

a fairy tale [Cook] 201-S

Blue Cross-Blue Shield of Kansas guilty of antitrust violations, 219-MLB

consultation service (pre-admission and length-of-stay certification) could resolve differences, benefit patients [Lockey] 207-E

Health Maintenance Organizations (HMO)

hospital medical staff barred from blocking HMO expansion, 183-MLB

Heart

continuous autotransfusion after coronary bypass surgery [Stephens] *343

late left ventricular function following angioplasty in acute myocardial infarction [Waites and Genton] *223

peripartum cardiomyopathy: a case report [Beebe and Gearhart] *67

right ventricular myocardial infarction [Atkinson] *297

Hemophilia

physician, hospitals in Illinois may be sued for wrongful birth of hemophiliac, 91-MLB

History of medicine

discovery: anatomy of and some experiences with [Hardy] 173-S

Hospitals

a new credentialing problem, 255-N

medical staff barred from blocking HMO expansion, 183-MLB

I

Indigent Care

senior care program to assist needy elderly, 349-N

"We Care Day" set [Steckler] 380-PP; 383-N

K

Knee

medial collateral ligament tears of the knee: a new approach [Shelton] *167

L

Legislation

MSMA's legislative proposals, 51-N

politics as unusual [Weems] 50-PP

"We Care Day" [Steckler] 380-PP; 383-N

Liver

effective palliation of metastatic adenocarcinoma to the liver: a case report [Smith et al] *301

hepatic cavernous hemangioma diagnosed by 99mTc blood pool scintigraphy [Sanders] 195-RS

Lung

surgical management of small cell lung cancer: a case report [Graham et al] *169

M

Malpractice (See also Professional Liability)

new trial for malpractice suit against chiropractor, 65-MLB

Medical Assurance Company of Mississippi

executive director comments on judiciary's effect on medical liability insurance [Haupt] 115-C

executive director's letter describes court ruling on medical expert witness [Haupt] 275-L

presents Caldwell Award, 276-N

Medical Education

discovery: anatomy of and some experiences with [Hardy] 173-S

Medicare

MD must pay \$78,000 penalty for false Medicare claim, 33-MLB

patients caught in Medicare crossfire [Lockey] 113-E

Medico-Legal Brief

a new credentialing problem, 255-MLB

Blue Cross/Blue Shield guilty of antitrust violations, 219-MLB

federal court enjoins regulations that bar abortion counseling, 313-MLB

FTC obtains consent order: hospital medical staff barred from blocking HMO expansion, 183-MLB

MD must pay \$78,000 penalty for false Medicare claim, 33-MLB

new trial for malpractice suit against chiropractor, 65-MLB

patient has constitutional right to refuse life sustaining treatment, 163-MLB

patient sues surgeon for not completing work forms, 128-MLB

physicians, hospitals in Illinois may be sued for wrongful birth, 91-MLB

vets disabled by alcoholism not entitled to time extension for educational benefits, 273-MLB

Members, New

Adams, Thomas Floyd, 120

Albert, Michael H., 158

Allen, Bret C., 25

Allen, Kay G., 25

Allgood, John M., 120

Allred, Cecilia G., 59

Anderson, Donna M., 158

Athar, Mohammad, 120

Avara, W. Travis, III, 158

Bagnato, V. John, 158

Ball, David Kyle, 283

Baumgartner, Eric T., 95

Beebe, Diane K., 25

Benefield, Boyd P., 95

Bernadas, Ronald P., Jr., 25

Bombard, Allan T., 59

Boyd, James Wilson, 59

Branch, Walter D., Jr., 95

Budden, Jeffrey Paul, 59

Burwell, Dudley S., 25

Bush, Freda M., 120

Butler, Harry Lyle, 283

Butler, Joel A., 158

Calilouette, Raymond K., 217

Callender, William R., Jr., 120

Cannon, Don Timothy, 355

Cappleman, Troy R., 158

Carr, Gary, 285

Carrell, Robert Paul, 59

Cavett, James Rick, 25

Chiang, T. Derek, 217

Chism, Jimmy, 59

Clements, J. Wesley, 217

Cobb, Thomas J., 120

Cook, Jeffrey Nelson, 355

Cope, John William, 25

Coby, Walter N., 120

Cummings, James A., 59

Cure, James D., 158

Current, John Davis, 25

Currie, Charles M., 120

Davis, Frank E., 120

Davis, J. T., Jr., 120

DeFreese, Craig N., 25

DeLashmet, Gordon B., Jr., 158

Demetropoulos, Steven L., 120

Denney, Sam J., 59

Denyer, Michael H., 59

Didlake, Ralph H., 217

Dodd, J. Edwin, Jr., 283

Dotherow, Darlene G., 217

Droffner, Mark C., 158

Easterling, S. Randall, 59

Edmondson, Henry L., 283

Edmondson, Marshall G., 60

Eyrosin, Edward, 283

El-Din, Ahmed R., 158

Eldridge, Donald Keith, 60

Evans, Thomas Charles Jr., 158

Fain, Kathy J., 217

Ferguson, Diane, 25

Feske, Steven C., 355

Fletcher, Jeff, 25

Forbes, Robert C., 158

Frank-Tarsi, Mary Anne, 158

Furniss, Jan L., 25

Gaddy, Donald Keith, 60

Gaddy, James Hurd, Jr., 26

Gilmore, James C., 121

Glasgow, Richard M., 355

Gonzalez, Maria I., 26

Googe, Jim, 283

Graeber, Michael C., 355

Graham, Bobby Lee, Jr., 283

Griffis, Kenneth Ray, Jr., 26

Hall, David Gene, 355

Hampton, Harriette Lee, 26

Hanson, Rae R., 121

Harisdangkul, Valee, 121

Harless, Stephen L., 60

Henson, Kenneth D., 158

Herzog, John L., 189

Hess, L. Wayne, 26

Hicks, Julie T., 121

Hicks, Rickey Lynn, 121

Hill, Frank S., Jr., 158

Hirsch, Catherine P., 283

Holdiness, Gary D., 189

Holzhauser, James L., 95

Hopper, Samuel P., 283

Horner, Philip Stanley, 355

Huffman, Mark S., 383

Jackson, Melinda C., 158

Jarmon, Henry M., Jr., 283

Jenkins, Morgan, 121

Johnson, Jack L., 217

Keady, Dwight S., Jr., 26

Kennedy, Ronald E., 217

Krafty, Mary Beth, 159

Krooss, William F., II, 159

Lautner, Lloyd W., 159

Lee, Deborah T., 283

Lee, James Anthony, 27

Leavengood, Douglas C., 355

Lind, Roger Charles, Jr., 121

Lovett, Maria M., 283

Lucas, John F., III, 217

Mallette, Robert A., 355

Manuel, Wilbert J., 159

Maranto, Gregory Steven, 121

Mathis, Robert Phillips, 60

McCaslin, Lucinda Jean, 159

McDonnell, Fred J., 60

McGraw, John J., 60

McIver, William Blair, 217

Meeks, William M., Jr., 121

Megason, Gail C., 283

Milhorn, Howard T., 218

Mills, Stephen J., 283

Moll, George W., Jr., 61

Montgomery, Stephen Q., 189

Moses, Louis Jefferson, 159

Mosquera, Luis F., 284

Mulvihill-Byers, Teresa G., 355

Myers, Mitchell Jeff, 121

Neill, James S., 27

Newell, Samuel D., Jr., 61

Nicholas, Lawrence Michael, 95

Oliver, Robert Phillip, 61

O'Neal, Susan D., 61

Orleans, Frederick S., 121

Parks, Paul Franklin, Jr., 27

Peeples, Samuel H., 27

Perkins, Lyndon H., 61

Phillips, Dierdre Melessa, 284

Pomierskii, David A., 355

Pribil, Stefan G., 284

Pritchard, Ronald S., 121

Pullium, Joe Stanley, 121

Raila, Frank A., 284

Ray, Linda Ilene, 121

Rice, Paul Matthew, 95

Rice, Steven N., 217

Rinzler, Gary Scott, 95

Robertson, Charles Ray, Jr., 121

Rockhold, Linda J., 122

Rodriguez, Marion C., 122

Rogert, William B., 284

Rose, Thele S., 96

Rowlen, Dennis W., 61

Rushing, David L., 284

Sams, Lucius F., III, 356

Sangani, Bharat H., 356

Savoie, Felix H., III, 218

Schraeder, Sara B., 27

Sessums, Joey K., 284

Sessums, Marion C., 122

Sexton, Harold, 218

Sheffield, Jerry Wayne, 122

Shrock, Wirt F., Jr., 27

Siefker, Joseph D., 356

Singh, Jatinder, 159

Sivils, Larry W., 285

Skelton, Thomas N., 285

Slack, Robert George, 27

Sledge, Charles C., 189

Slocum, Wayne A., 61

Smith, Bennett E., Jr., 160

Smith, Christopher E., 122

Smith, Jeanne Ann, 61

Spruiell, Linwood Ray, 27

Steiner, Albin H., 27

Stephens, William Daniel, 285

Stewart, Lawrence E., 122

Stewart, Reginald W., 285

Stumme, Luther Paul, 160

Sullivan, David Mark, 96

Szabo, Cheryl J., 122

Tarver, Robert Sidney, 96

Tate, Robert P., 62

Teasdale, Kathy J., 356

Tew, William E., 160

Tillman, Barry Forrest, 122

Tompkins, Eric R., 218

Tumminello, Sam C., 285

Tutor, James Dudley, 62

Van Uden, Robert T., Jr., 356

Wade, Frank C., Jr., 218

Wallace, Perry, 160

Ward, John Arthur, 285

Watson, William Bruce, 62

Weeks, Thomas Lane, 27

Welch, Bert A., III, 27

Wellman, Samuel D., Jr., 285

West, Flavia H., 160

Williams, A. Terrell, 62

Williams, Ada F., 356

Williams, David Joe, 356

Wilson, Darlynn W., 27

Wilson, James Kirk, 27

Wilson, Jo Perkins, 285

Wisniewski, Peter F., 160

Witty, David H., 285

Wood, Evan H., 27

Zachow, Steven E., 96

Mississippi Academy of Family Physicians

installs Dr. Malcolm Moore as president, 315-N

Mississippi Lung Association

elects new officers, 209-N

honors Dr. Guy Campbell, 209-N

Mississippi State Medical Association

address of the president [Weems] 231-S

Board of Trustees — conducts fall meeting, 21-N;

elects new officers, 239-N

Caduceus Club honors Dr. Sutherland, 276-N

ceremony marks opening of headquarters building, 53-N

Impaired Physicians Program: an overview [Moffitt]

*377

president's pages [Weems] — "Unity," 18-PP;

"Politics as Unusual," 50-PP; "The Other Medical

Profession," 84-PP; "Fantasies," 112-PP; "In

Conclusion," 146-PP

president's pages [Steckler] — "Looking Toward the

Future," 178-PP; "Expressions of Concern and

Direction," 206-PP; "Attending the House of

Medicine," 234-PP; "Relative Values Need Relative

Views," 272-PP; "Strategic Planning Project: A Preliminary Report," 312-PP; "We Care

Day in Jackson," 380-PP

"Senior Care" program to assist needy elderly, 349-N

Tolbert awards presented, 181-N; 210-N
"We Care Day" Set, 383-N

Young Physicians Section — elects officers, 276-N;
state governor-elect speaks at YPS meeting, 21-N
120th Annual Session — council announces plans,
89-N; preliminary program announced, 117-N; of-
ficial call and program, 151ff; Mark Shields to
speak, 153-N; complete follow-up report, 237-N
121st Annual Session — Council sets preliminary
schedule, 349-N

delegation to AMA recognized for AMA recruitment
effort, 348-N

Mississippi Thoracic Society

Boswell Lecture during MTS annual meeting, 383-N

Mississippi Urological Society

contributes to UMC fund, 90-N

Moore, Malcolm

installed as president of Mississippi Academy of Fam-
ily Physicians, 315-N

Myelomeningocele

adolescence/sexuality/vocational skills [Long] *45
the primary care physician's role in management of
the patient with myelomeningocele [Graves et al]
*75

N

Neonatology

the primary care physician's role in management of
the patient with myelomeningocele [Graves et al]
*75

Neoplasm

desmoid tumors: report of a case responsive to an-
tiestrogen and review of the literature [Balducci et
al] *27

Neurology

book reviews [Tipton] 274-BR; 314-BR
intraoperative detection of unilateral spinal cord dys-
function by somatosensory evoked potentials [Ash-
ley and Wee] *339

Neurosurgery

intraoperative detection of unilateral spinal cord dys-
function by somatosensory evoked potentials [Ash-
ley and Wee] *339

the use of allografts in anterior cervical interbody
fusion [Frothingham and Solomon] *71

Newton, Michael

funeral services held, 210-N

Nursing

reader comments on president's page on nursing
[Tucker] 149-L
the other medical profession [Weems] 84-PP

O

Obesity

fat cats [Johnston] 179-E
reader comments on causes of obesity [Kruckeberg]
275-L
reader shares difficulty in getting diabetic patients to
lose weight [Owen] 275-L

Obstetrics

antenatal diagnosis for the clinician [Bombard] *307
obstetrical manpower in Mississippi: Where are the
babies being born? [Wiygul et al] *333
peripartum cardiomyopathy: a case report [Beebe and
Gearhart] *67
pregnancy-associated substance abuse and addiction:
current concepts and management [Martin et al]
*369

Organ Donor Law

letter comments on organ donor law [Raju] 19-L
letter describes donor procurement protocol [Patter-
son] 20-L

Orthopaedic Surgery

medial collateral ligament tears of the knee: a new
approach [Shelton] *167

P

Patients

editorial comments on doctor-patient relationship
[Derrick] 147-E
patient has right to refuse life-sustaining treatment,
163-MLB

Pediatrics

pediatric seminar scheduled, 276-N
the primary care physician's role in management of
the patient with myelomeningocele [Graves et al]
875

Personals

Abraham, George, 98; 213; 351; 385
Achord, James, 287
Albea, John M., 213
Alexander, Richmond, 125

Allen, Paul, 57; 287
Al-Mefty, Ossama, 213; 351
Anand, Vinod, 57; 125; 351
Andy, Orlando, 30; 98; 287
Ashley, Tim, 185
Ball, G. Christopher, 57
Barham, Ed D., 351
Barksdale, Bryan, 327
Barnes, Helen, 98
Barnes, J. Russell, 287
Barnett, J. C., 385
Barnett, W. O., 57
Barrett, Gene R., 213; 214
Barrett, Pat, 385
Bass, Charles P., 385
Batson, Blair, 30; 125; 156; 287
Beam, J. Stephen, 30
Beebe, Diane, 125
Belchic, George J., 214; 253
Benson, Chris, 385
Blake, Thomas M., 213
Blanton, Ted, 98
Blumenthal, Bernard, 125
Boland, Michael J., 287
Bolton, D. L., 58
Bombard, Allan T., 327
Boronow, Richard, 125
Bradford, Bert E., 287
Brandon, L. H., 213
Briseno, Oscar, 290
Brock, Ralph, 156
Brooks, Michael, 327
Broom, Sarah, 351
Bross, Michael, 327
Bruce, David, 156
Burford, Sandra F., 287; 385
Burk, John, 385
Burrus, Swan, 213
Butler, Harry, 253; 351
Cade, James, 57
Caden, John G., 185
Caldwell, W. E., 287
Campbell, W. R., 253
Cannon, C. Ron, 57; 125; 185; 287
Carr, Martha Ann, 327
Carruth, Edward, 156
Cates, Robert T., 253
Causey, William, 156
Chaney, Geraldine, 98
Chapman, John D., 385
Chen, Ching, 57
Chetta, Marc, 125
Chevis, Bertin, 57; 185
Clark, Alan J., 213
Clay, John, 213
Cobb, Alton B., 327
Collins, Robert, 185; 327
Conn, Richard A., 98; 213
Conner, Michael G., 253
Cook, Jeffrey N., 288
Cooper, Tom, 327
Cowan, Bryan, 30; 57; 125; 287; 327; 385
Council, Benjamin P., 327
Crawford, Dewitt, 57
Crawford, E. Howell, Jr., 327
Creekmore, Sam, 385
Cronin, Ken, 57
Crosthwait, James, 125
Dahl, Eric, 31
Daniel, C. Ralph, III, 57; 213; 351
Das, Suman K., 30; 57
Davidson, Edwin M., 327
Davis, Don S., 287
Davis, J. T., 125
Dean, Phillip C., 290
Dement, Frank E., III, 185
Dickerson, Quinton, 125
Didlake, Ralph, 287; 351
Dillon, Alva, 185
Dodd, J. Edwin, Jr., 287
Drake, John D., 125
Edmondson, Henry, 327
Emerson, Charles W., Jr., 287
Evans, Owen, 30; 287; 385
Evers, Carl, 327
Farina, Joseph W., Jr., 287
Farr, A. Lewis, 57
Fellows, William R., 156
Field, Richard Jr., 57; 213; 253; 351
Fly, J. D., 30; 327
Fokakis, Arthur, 287
Freeland, Alan, 125; 156; 253; 327

Frelax, Gloria D., 185
Fry, Matthew G., 253
Fuchs, Paul D., 327
Furr, George, 287
Gabbert, Elmo, 30
Gaines, Sharon, 327
Gamble, Hugh A., 30
Gearhart, Judy, 30
Gibson, John Y., 57; 287
Gill, Patrick H., 125
Glasgow, Richard M., 288
Glasgow, Thomas S., 288
Goode, Paul, 253
Googe, Jim, 288
Gough, Walter, 185
Grafton, Ken, 185
Graham, James C., 385
Granger, Wesley D., 351
Grant, Fred Y., 327
Giffith, James E., 30; 125; 253; 328
Guttman, Stuart, 156
Haick, Alex J., 288
Haire, William C., 329
Hall, David, 288
Hammett, Larry J., 30
Hardy, James D., 30
Hartwig, Geoffrey B., 287
Hays, James, 125
Heath, Bobby, 125
Helms, Harper, 253
Hensarling, James K., 58
Hess, Wayne, 385
Hey, John, 156
Hicks, John B., 185
Higgins, Robert, 57; 351; 385
Hilbun, Benton M., 125
Hill, J. Ed, 98; 385
Hirsch, Catherine, 351
Hirsch, David I., 385
Holcomb, Barry, 287
Holland, C. Mitch, 287; 328
Hollis, Richard S., 98; 185
Hsu, Patrick, 288; 351
Hudson, C. Nolen, 287
Hudson, Jack, 213
Hughes, James, 30; 57; 185; 288; 385
Hughes, Wayne A., 328
Humble, Lee, 253
Hutchinson, Max, 351
Irwin, David H., Jr., 351
Ivancic, Edward, 213
Jabaley, Michael, 213; 253
Jackson, Dan, 57
Jackson, Gary, 328
Jackson, John, 253; 288
Jenkins, Cecil, 213
Johnson, Richard, 156; 253
Johnson, Samuel, 185; 288
Johnston, Joseph E., 98
Jorden, Robert, 30
Kahlstorf, William L., 288; 385
Keddy, David R., 253
Keel, Dan, 57
Kellum, William C., 30
Keyes, Prentiss, 328
Kirchner, Kent, 57; 351
Kirkland, Kim, 31
Langford, Herbert, 30; 98; 156; 288
Lanier, Douglas, 328
Leavengood, Douglas C., 288
Lee, Deborah C., 254
Lehan, Patrick, 328
Long, Billy W., 328
Long, William A., 156
Longest, John C., 156
Love, Kimble, 185
Lowicki, Edward M., 98; 213
Lucas, John F., Jr., 288
Lucas, John F., III, 288
Mansel, Keith, 254
Marascalco, Don E., 288
Marascalco, Frank T., 125; 156
Martin, James, 98; 288; 328
Martin, Rick, 30
Martin, Sherry, 385
Mason, Phyllis E., 98
Mathis, Phil, 288
Matthews, J. Mark, 328
Mayo, William S., 57
McClain, Eldon L., 98
McCrary, R. Bryant, 290
McFadden, John W., 57; 185

McGehee, Helen G., 288
 McIntyre, L. L., 185
 McLaurin, Clyde Ray, 385
 McMahan, Lynn B., 288
 McNair, A. E., 126
 McRae, John M., 156
 Meeks, G. Rodney, 351
 Merrell, W. H., Jr., 385
 Miller, Ed., 156
 Mills, Stephen J., 254
 Mitchell, John E., 185
 Mitchell, Joseph R., 185
 Moak, William E., 185
 Montgomery, Charles, 288
 Mooney, J. Spencer, 288
 Morgan, Frank, 57; 214
 Morris, Toxey M., 254
 Morrison, Doyle, 289
 Morrison, Francis, 289
 Morrison, John, 30; 57; 126; 185; 289, 328
 Mosquera, Luis F., 98
 Murphree, Lee Roy, 126
 Murry, Charles W., 57
 Mutziger, Dudley H., 156
 Mutziger, John C., 30
 Myers, Ann, 57
 Myers, Mitchell, 58
 Nelson, Norman, 31; 126; 289
 Nelson, Phil O., 126; 351
 Nicholas, William C., 31; 58; 126; 386
 Nichols, Howard, 58; 156; 289; 386
 Nicholson, Michael T., 126
 Nix, J. Elmer, 254
 Northey, Dan, 254
 North, Darden H., 214
 Nowell, Richard, 126
 O'Mara, Charles, Jr., 126; 351
 Owen, David, 185
 Owen, J. Lee, 213
 Pace, William, 386
 Palmer, Robert O., 289
 Pande, P. V., 327
 Parent, Andrew, 31; 289; 351
 Passman, Carl, 289
 Payne, Hernando, 31
 Payne, William D., 213
 Peden, Rick, 30
 Pharr, Max L., 289
 Pickering, Billy Mack, 289
 Pitre, Wayne, 214
 Pomierski, David A., 328
 Poole, James S., 000
 Pribil, Stefan, 289
 Pullen, Jeannette, 254; 386
 Raju, Seshadri, 98; 156; 328; 386
 Rhodes, Robert, 289; 351; 386
 Rigdon, Edward E., 352
 Rivlin, Michel, 289
 Robinson, Samuel P., 290
 Rockhold, Linda, 58; 386
 Rogers, William, 290
 Rose, Ethel, 214
 Ross, Randolph, 157; 253
 Rudeen, D. C., 58
 Rush, Gus A., III, 157
 Saccoccia, Philip, Jr., 386
 Sams, James H., 98; 185
 Sanders, Henry J., 98
 Sangani, Bharat, 290
 Savoie, Felix, 352
 Schmidt, Frank, 352
 Schmidt, Robert J., 157
 Schreiter, Spencer, 157
 Scott-Conner, Carol, 254
 Segars, Kelly S., Sr., 31; 126
 Senter, Steve, 214
 Sessums, Hildon H., 157
 Sessums, J. Kim, 254
 Shappley, Nathan, 58
 Sharbrough, Raymond, 287
 Sheffield, James A., 290
 Shirley, James H., 185
 Siefker, Joseph D., 290; 386
 Sivils, Larry W., 289
 Smith, Keith, 58
 Smith, N. E. Murillo, 290
 Smith, Robert, 31; 290
 Smith, Robert H., Jr., 329
 Songcharoen, Suthin, 157; 290
 South, Dwalia, 157
 Spencer, William A., 288
 Stephens, William D., 186
 Stockton, Wendell H., 186
 Stroble, Charles, 126
 Stubblefield, Earl, 157

Stubbs, Kenneth W., 98
 Szabo, Cheryl L., 214
 Tanksley, John, 31; 214
 Tannehill, Antone, 290
 Tarpy, Patrick, 58
 Tatum, Nancy, 214
 Taylor, C. D., 352
 Taylor, Eugene E., 214
 Taylor, Max, 31
 Teasdale, Kathy J., 290
 Tew, William, 290
 Thigpen, Tate, 98; 157; 254; 329
 Thomas, Douglas F., 254
 Thompson, Charles, 58
 Timm, David, 352
 Tripton, Ancel, 186; 214
 Triplett, Laramie C., 254
 Trunzler, B. G., 352
 Tumminello, Sam C., 329
 Tutor, James D., 329
 Ulmer, Jacob E., 156
 Vise, Guy T., Jr., 186
 Voller, Robert D., 185
 Voyles, C. Randle, 386
 Waite, Thad, 214; 386
 Waldron, Willard, 157
 Walker, Billy, 58
 Walley, W. W., 290; 352
 Ward, Frazier, 31; 214; 254
 Ward, John, 290
 Warner, William C., 126
 Warrington, James E., 58
 Webber, Charles M., 254
 Webster, Stevan, 290
 Weems, W. Lamar, 58; 126; 186; 214; 254; 352
 Welch, Jerry, 126
 Wellman, Sam, 290
 White, C. K., 58
 White, Elbert A., III, 254; 290
 White, John J., 386
 Wilkerson, George E., 329
 Williams, Charles H., 254
 Williams, James K., 214
 Williams, M. Ney, 126
 Williamson, A. Duane, 329
 Wilson, Jo Perkins, 290
 Wise, Louis, 214
 Wiser, Winfred, 290
 Witty, Joseph B., 329
 Wofford, John Jr., 31; 290
 Wood, A. E., 254
 Wood, William M., 58; 214; 352
 Woodard, James S., 290
 Wooldridge, Tom, 352
 Yeoman, Elmer E., 290
Pesticides
 AMA issues recommendations on agricultural pesticides, 181-N
Physicians
 as role models [Johnston] 51-E
 obstetrical manpower in Mississippi: Where are the babies being born? [Wiygul et al] *333
 patients and doctors: commerce and caring [Derrick] 147-E
 reimbursement proposals require united response [Lockey] 347-E
 unity [Weems] 18-PP
Placement Service
 listings on pages 34, 66, 100, 129, 165, 190, 222, 258, 295, 331, 362
Poisoning (see Pesticides)
Polio
 Rotary International's polio-plus project described [Masterson] 85-L
Postgraduate Calendar
 listings on pages 28, 63, 93, 119, 164, 186, 252, 292, 324, 359
Practice of Medicine
 a fairy tale [Cook] 201-S
 borborygmia [Johnston] 235-E
 professionalism under siege [Weems] 141-S
Pregnancy (see also Obstetrics)
 peripartum cardiomyopathy: a case report [Beebe and Gearhart] *67
 pregnancy-associated substance abuse and addiction: current concepts and management [Martin et al] *369
Professional Liability
 default judgment against physician upheld, 361-MLB
 judiciary has impact on medical liability insurance [Haupt] 114-C
 Jury of My Peers [Sutherland] 382-BR
 letter describes court ruling on medical expert witness [Haupt] 275-L

new trial for malpractice suit against chiropractor, 65-MLB
 patients and doctors, commerce and caring [Derrick] 147-E
Psychiatry
 the treatment of somatizing patients [Griffith] *259
R
Radiological Seminars
 CCXLVIII: growing skull fractures of childhood [Deschamps and Blumenthal] 16-RS
 CCXLIX: role of radiographic evaluation in the diagnosis of epiglottitis [Turner and Blumenthal] 43-RS
 CCXLX: herpes simplex encephalitis: CT findings [Gates and Morano] 109-RS
 CCXLXI: hepatic cavernous hemangioma diagnosed by 99mTc blood pool scintigraphy [Sanders] 195-RS
Relative Value Studies
 relative values need relative views [Steckler] 272-PP
 reimbursement proposals require united response [Lockey] 347-E
Rhodes, Robert S.
 named UMC surgery department head, 56-N
S
Science of Medicine
 discovery: anatomy of and some experiences with [Hardy] 173-S
Scoliosis
 intraoperative detection of unilateral spinal cord dysfunction by somatosensory evoked potentials [Ashley and Wee] *339
Smoking
 a burning issue: attitudes towards environmental tobacco smoke [Thomas et al] *131
 doctor ignites idea: license smokers [Rogers] 87-C
Somatic Illnesses
 the treatment of somatizing patients [Griffith] *259
Sutherland, C. G.
 receives Caduceus Club's first outstanding service award, 276-N
Surgery
 what everybody should know about vascular trauma (Thompson Lecture) [Johansen] 35-S
T
Throat
 role of radiographic evaluation in the diagnosis of epiglottitis [Turner and Blumenthal] 43-RS
Trauma
 what everybody should know about vascular trauma: Thompson lecture [Johansen] 35-S
Triplett, R. Faser
 elected president, American College of Allergists, 22-N
Tumor
 desmoid tumors: report of a case responsive to antiestrogen and review of the literature [Balducci et al] *227
U
University Medical Center
 announces faculty appointments: 23-N; 247-N; 279-N; 317-N; 318-N
 appoints Dr. Bishop to faculty, 320-N
 appoints Dr. Pitts to faculty, 118-N
 board members observe NICU, 320-N
 Barnard distinguished professors, 315-N
 cancer program receives three-year approval, 182-N
 Culpepper lecturer, 56-N
 Dr. Nichols receives Holliman award, 278-N
 Guardian Society officers, 182-N
 honors Dr. Warren Bell, 118-N
 medical school has 100% match, 181-N
 names Dr. Bloom department head, 249-N
 names Dr. Robert Rhodes as head of surgery department, 56-N
 names new director of infectious diseases division, 322-N
 receives MSMA Auxiliary support for cancer clinic, 89-N
 urological society contributes to visiting professor's fund, 90-N
Urology
 extravasation from the upper urinary tract: three case reports [Elliott et al] *269
V
Vascular Surgery
 growing skull fractures of childhood [Deschamps and Blumenthal] 16-RS
 what everybody should know about vascular trauma: Thompson lecture [Johansen] 35-S

AUTHOR INDEX

The letters used to explain in which department the matter indexed appears are as follows: "A," Abstract; "C," Comment; "E," Editorial; "N," News; "L," Letters to the Editor; "PP," President's Page; "RS," Radiologic

Seminar, "MLB," Medico-Legal Brief; "BR," Book Review; "AP," Auxiliary Page; "S," Special Article; the asterisk (*) indicates an original article in the Journal.

A
Abraham, George E., 273-E
Ashley, R. A., *339
Atkinson, Bruce, *297

B
Balducci, Lodovico, *101; *169; *227
Barron, Marcia, *75
Beebe, Diane Kay, *67
Blumenthal, Bernard I., 16-RS; 43-RS
Bombard, Allan T., *307
Brackin, Bruce T., *131

C
Cannon, C. Ron, *41
Causey, William A., *11
Cook, Donald E., 201-S

D
Defore, W. Wilson, Jr., *191
Derrick, A. A., Jr., 147-E
DesChamps, G. Thomas, 16-RS

E
Elliott, John P., *269
Evans, John W., *269

F
Frothingham, Rodney E., *71

G
Gates, T. Gerald, 109-RS
Gearhart, Judith G., *67
Genton, Edward, *223
Gibson, William J., Jr., *137
Gookin, Kathy S., *106
Gordon, James O., *269
Graham, Bobby Jr., *169
Graves, Glen R., *75
Graves, Marilyn D., *75
Griffis, Kenneth R., *106
Griffith, James L., *259

H
Hardy, James O., 173-S
Hatten, Karl W., 52-L
Hess, L. Wayne, *369
Hill, J. Edward, 85-E; 381-E
Houpt, Mike D., 113-C; 275-L

J
Johansen, Kaj, 35-S
Johnston, Joseph E., 51-E; 85-E; 178-E; 235-E; 313-E
Jones, Ellen Shea, *131

K
Khansur, Tawfiq, *169; *227
Kruckeberg, Walt, 275-L

L
Lambuth, Bruce, *169
Little, Diana D., *227
Lockey, Myron W., 19-E; 113-E; 207-E; 347-E
Long, William A., *45

M
Martin, James N., Jr., *369
Martin, Rick W., *369
Masterson, Chester W., 85-L
McCall, James F., *369
McColgin, S. W., *369
McGehee, Ramon P., *106
McVey, Eric A., *1
Milan, William Hughes, *269
Milhorn, H. T., Jr., *333
Moffitt, Ellis M., *377
Morano, James U., 109-RS
Morrison, John C., *106; *369

O
Owen, David M., 275-L

P
Parsons, P. Morris, 314-L

Patterson, Mary M., 20-L
Pennington, Edward, 314-L
Phillips, D. Melessa, *101
Platt, Lucas O., *269

R
Raju, Seshadri, 19-L
Reagan, Morris T., *301
Replogle, William H., *101
Robbins, J. G., *333
Rogers, Joe, 87-C

S
Sanders, Jane A., 195-RS
Sanders, Sheila D., *101
Shelton, Walter R., *167
Shields, John G., 314-L
Smith, Doyle P., *375
Smith, R. Arnold, *301
Solomon, Alexandre, *71
Spencer, Robert, *227
Steckler, David R., 178-PP; 206-PP; 234-PP; 272-PP; 312-PP; 346-PP; 380-PP
Stephens, David B., *343
Stephens, Elizabeth, *343
Stubblefield, G. Crawley, *301
Sutherland, C. G., 382-BR

T
Thomas, David R., *131
Thompson, F. E., *3; *131
Tipton, Ancel C., 274-BR; 314-BR
Tucker, Frank H., Jr., 149-L
Turner, Jennifer, 43-RS

W
Waites, Thad, *223
Wee, A. S., *339
Weems, W. Lamar, 18-PP; 48-PP; 84-PP; 112-PP; 148-PP; 141-S; 231-S
Wiser, Winfred L., *106
Wiygul, F. M., *333
Wofford, John D. Jr., *8

TABLE OF PAGES

January	1 to 34
February	35 to 66
March	67 to 100
April	101 to 130
May	131 to 166
June	167 to 190

July	191 to 222
August	223 to 258
September	259 to 296
October	297 to 332
November	333 to 362
December	363 to 392

PLACEMENT SERVICE

PHYSICIANS AVAILABLE

PHYSICIAN COMPLETING RESIDENCY in obstetrics and gynecology seeks practice opportunity in Mississippi. Available July 1989. Contact Greg Patton, M.D., 2325 Glenmary Avenue #2, Louisville, KY 40204.

EXPERIENCED PHYSICIAN, seeking licensure, wants position as assistant. Location flexible. P.O. Box 225, Bay Springs, MS 39422.

PHYSICIAN completing residency in general surgery, and spouse (board-eligible pediatrician) seek practice opportunities in Mississippi. Location flexible. Contact Dinesh Ranjan, M.D., 2118 Chantilla Rd., Catonsville, Md 21228.

NATIVE MISSISSIPPIAN seeking practice opportunity in Ob-Gyn. Will complete residency and be available in July 1989. Contact Walter Wolfe, M.D. 722 West Austin Dr., Peoria, IL 61614; (309) 655-2000.

PHYSICIAN completing residency in psychiatry seeks practice opportunity in Mississippi. Available July 1989. Contact DeBora Murphy, M.D., P.O. Box 53, Vahalla, NY 10595 or call (914) 592-2710.

PHYSICIANS WANTED

EMERGENCY PHYSICIANS WANTED. Part-time and full-time positions in northeast Mississippi. Call (601) 328-8385.

PHYSICIANS NEEDED in Mississippi and other southern states. All specialties needed for both rural and urban locations. Solo and multi-specialty practices available. For further information contact the Lewis Group, 1227 N. Valley Mills, Suite 200, Waco, TX 76710; phone (817) 776-4121.

PHYSICIANS WANTED AND NEEDED: Family Practice, General Surgery, Internal Medicine, OB/GYN. Excellent living conditions, exceptional school system. Terms negotiable with community visit expenses, relocation expenses, office space, guarantee cash flow, interest free line of credit for 12 to 18 months, etc. Other opportunities available. Call or write Richard Manning, Administrator, Tyler Holmes Memorial Hospital, Tyler Holmes Drive, Winona, MS 38967, (601) 283-4114.

INTERNIST needed to fill vacancy. Association with well-established internist who has excellent practice. Financial package available. One of the top

industrial growth areas in Mississippi. Contact: Grenada Lake Medical Center, Grenada, MS 38901; (601) 226-8111, Paul J. Wood, chief executive director.

FAMILY PRACTICE — Join a group of seasoned peers who have been in the trenches and who want to control their practice of medicine rather than vice-versa. If you would like general medicine with the option of part-time E.R. work; if you want to reclaim your freedom, have more time for your family, and divorce yourself from all the problems associated with modern practice, i.e., exorbitant office overhead, personnel problems, tyrannosaurus-like medical record departments, phone Sandy McBrayer at 1-601-328-2525, (collect).

OB-GYNS. Private practice opportunities for two Ob-Gyn specialists in Mississippi Delta. Fully equipped 260-bed hospital. Call 601-459-2604.

PEDIATRICIANS. Private practice opportunities for two pediatricians in Mississippi Delta. Fully equipped 260-bed hospital. Call 601-459-2604.

NEUROLOGY. SEI Health Services is seeking two adult neurologists and one pediatric neurologist for a large neurological group in the Southeastern United States. Recruiting board-eligible or board-certified physicians. Competitive salary and comprehensive benefit package that includes malpractice insurance and relocation assistance. Clinical experience in EEG, EMG, evoked response, doppler ultrasound, and sleep disorders preferred. Send resume to: SEI Health Services Division, James Hacker, General Manager 7725 Little Ave., Charlotte, NC 28226; or call: (704) 542-7100.

NATCHEZ, MISSISSIPPI — Seeking director, full-time and part-time emergency department physicians for 101 bed hospital. Attractive compensation, full malpractice insurance coverage, and benefit package available. Contact: Emergency Consultants, Inc., 2240 S. Airport Rd., Room 46, Traverse City, MI 49684; 1-800-253-1795.

BOARD CERTIFIED/ELIGIBLE GENERAL INTERNIST wanted for an excellent practice opportunity in East Central Mississippi. Revenue guaranty with interview and relocation expense underwritten. Practice area offers many recreational amenities in a family oriented community. 40-bed JCAHO hospital with multiple health care programs. Excellent professional environment. Send CV to Chief Executive Officer, H.C. Watkins Memorial Hospital, 605 S. Archusa Ave., Quitman, MS 39355; (601) 776-6925.

PHYSICIANS NEEDED

Physicians (especially specialists such as ophthalmologists, pediatricians, orthopedists, neurologists, etc.) interested in performing consultative evaluations (according to Social Security guidelines) should contact the Medical Relations Office. WATS 1-800-962-2230; Jackson, 922-6811; Martina Mayfield (ext. 2276) or Becky Ruggles (ext. 2300).



DISABILITY DETERMINATION SERVICES
1-800-962-2230

CLASSIFIED

1983 MIDMARK ALL ELECTRIC EXAM TABLE. Good Condition. \$3,500.00. Call 601/268-5240

MEDICAL OFFICE SPACE: 1000 sq. ft. office available August 1, 1988. In building with pediatric clinic in rapidly growing northwest Rankin County. Call 992-0110.

X-RAY MACHINE in excellent condition. Best offer. Call (601) 328-0830.

2V STAT STAT STAT *** Diagnostic/therapeutic decision support software, covering 69 specialties. Medical Algorithms (flow charts) are grouped according to complaint, sign, symptom, organ and system, specialty, age, and MDC/DRG. Updated medical knowledge Algorithms at your fingertips!!! Only \$5,787.00 for complete turnkey system (2V STAT Software, Knowledge base/69 Specialties. AT computer 80286/10 turbo CPU, 80MB HD, EGA monitor and card, printer and 40MB backup). 2V STAT, 2480 Windy Hill Road, Suite 201, Marietta, GA 30067; (404) 956-1855.

Index to Advertisers

Avanti	379	Northtowne Printers	374
CancerPay Plus	6	Premier Printing	10
Central Mississippi Amusements	9	Quality Health Resources	4
Disability Determination	11	Roche Laboratories	third, fourth covers
Harrel Chevy-Olds	9	Touro Infirmary	367
Eli Lilly and Co.	386-B	Trustmark	386
Medical Assurance Co. of Miss.	second cover	U. S. Air Force	8
Miles Laboratories	370A, 380B	U. S. Army Reserve	368, 386-A
Miss. Dept. of Corrections	386	U. S. Naval Reserve	10
Miss. Emergency Association	385	Jon Wimbish	12
MSMA Benefit Plan & Trust	376		



“When I realized my chances of becoming disabled by age 65 were *three times greater* than the chances of death . . .

I compared disability insurance plans. And I decided that my MSMA-endorsed disability insurance plan

SERVES ME BEST!

It's not group insurance, but an individually-owned policy which is *non-cancellable* and *guaranteed renewable*.”

If you're a member of the Mississippi State Medical Association you may be eligible for this outstanding professional disability plan at *discounted premiums*.

- Non-cancellable, guaranteed renewable
- Medical specialty protection
- Presumptive loss provision
- Indexing of prior earnings
- Waiver of premium
- Cost of living rider
- Future disability insurance option
- Lifetime accident and sickness rider
- Total and residual disability protection

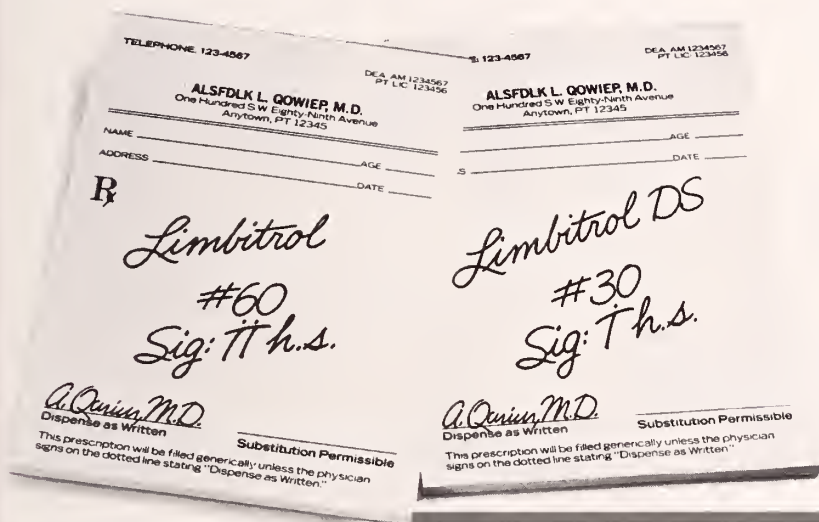
Offered by Paul Revere Insurance Company to MSMA members through its exclusive representatives, Professional Disability Specialists.

Jon B. Wimbish, Disability Specialist

1501 Lakeland Drive, Suite 200 Jackson, MS 39216 Telephone 362-9800

In moderate depression and anxiety

- ➡ 74% of patients experienced improved sleep after the first *h.s.* dose¹
- ➡ First-week improvement in somatic symptoms¹
- ➡ 50% greater improvement with Limbitrol in the first week than with amitriptyline alone²



Protect Your Prescribing Decision:
Specify "Do not substitute."

Limbitrol®

Each tablet contains 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt) (N)

Limbitrol® DS

Each tablet contains 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt) (N)

References: 1. Data on file, Hoffmann-La Roche Inc., Nutley, NJ. 2. Feighner VP, et al: *Psychopharmacology* 61:217-225, Mar 22, 1979.

Limbitrol® (N)

Tranquilizer—Antidepressant

Before prescribing, please consult complete product information, a summary of which follows:

Contraindications: Known hypersensitivity to benzodiazepines or tricyclic antidepressants; concomitant use with MAOIs or within 14 days of monoamine oxidase inhibitors (then initiate cautiously, gradually increasing dosage until optimal response is achieved); during acute recovery phase following myocardial infarction.

Warnings: Use with caution in patients with history of urinary retention or angle-closure glaucoma. Severe constipation may occur when used with anticholinergics. Closely supervise cardiovascular patients. Arrhythmias, sinus tachycardia, prolongation of conduction time, myocardial infarction and stroke reported with tricyclic antidepressants, especially in high doses. Caution patients about possible combined effects with alcohol and other CNS depressants and against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving).

Use in Pregnancy: Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations. Consider possibility of pregnancy when instituting therapy.

Withdrawal symptoms of the barbiturate type have occurred after discontinuation of benzodiazepines (see Drug Abuse and Dependence).

Precautions: Use cautiously in patients with a history of seizures, in hyperthyroid patients, those on thyroid medication, patients with impaired renal or hepatic function. Because of suicidal ideation in depressed patients, do not permit easy access to large quantities of drug. Periodic liver function tests and blood counts recommended during prolonged treatment. Amitriptyline may block action of guanethidine or similar antihypertensives. When tricyclic antidepressants are used concomitantly with cimetidine (Tagamet), clinically significant effects have been reported involving delayed elimination and increasing steady-state concentrations of the tricyclic drugs. Use of Limbitrol with other psychotropic drugs has not been evaluated; sedative effects may be additive. Discontinue several days before surgery. Limit concomitant administration of ECT to essential treatment. See Warnings for precautions about pregnancy. Should not be taken during the nursing period or by children under 12. In elderly and debilitated, limit to smallest effective dosage to preclude ataxia, oversedation, confusion or anticholinergic effects. Inform patients to consult physician before increasing dose or abruptly discontinuing this drug.

Adverse Reactions: Most frequent: drowsiness, dry mouth, constipation, blurred vision, dizziness, bloating. Less frequent: vivid dreams, impotence, tremor, confusion, nasal congestion. Rare: granulocytopenia, jaundice, hepatic dysfunction. Others: many symptoms associated with depression including anorexia, fatigue, weakness, restlessness, lethargy.

Adverse reactions not reported with Limbitrol but reported with one or both components or closely related drugs: **Cardiovascular:** Hypotension, hypertension, tachycardia, palpitations, myocardial infarction, arrhythmias, heart block, stroke. **Psychiatric:** Euphoria, apprehension, poor concentration, delusions, hallucinations, hypomania, increased or decreased libido. **Neurologic:** Incoordination, ataxia, numbness, tingling and paresthesias of the extremities, extrapyramidal symptoms, syncope, changes in EEG patterns. **Anticholinergic:** Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract. **Allergic:** Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus. **Hematologic:** Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia. **Gastrointestinal:** Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, black tongue. **Endocrine:** Testicular swelling, gynecomastia in the male, breast enlargement, galactorrhea and minor menstrual irregularities in the female, elevation and lowering of blood sugar levels, and syndrome of inappropriate ADH (antidiuretic hormone) secretion. **Other:** Headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, jaundice, alopecia, parotid swelling.

Drug Abuse and Dependence: Withdrawal symptoms similar to those noted with barbiturates and alcohol have occurred following abrupt discontinuance of chlordiazepoxide; more severe seen after excessive doses over extended periods; milder after taking continuously at therapeutic levels for several months. Withdrawal symptoms also reported with abrupt amitriptyline discontinuation. Therefore, after extended therapy, avoid abrupt discontinuation and taper dosage. Carefully supervise addiction-prone individuals because of predisposition to habituation and dependence.

Overdosage: Immediately hospitalize patient. Treat symptomatically and supportively. I.V. administration of 1 to 3 mg physostigmine salicylate may reverse symptoms of amitriptyline poisoning. See complete product information for manifestation and treatment.

How Supplied: Double strength (DS) Tablets, white, film-coated, each containing 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt), and Tablets, blue, film-coated, each containing 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt)—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 50.



ROCHE PRODUCTS INC.
Manati, Puerto Rico 00701

In the depressed and anxious patient

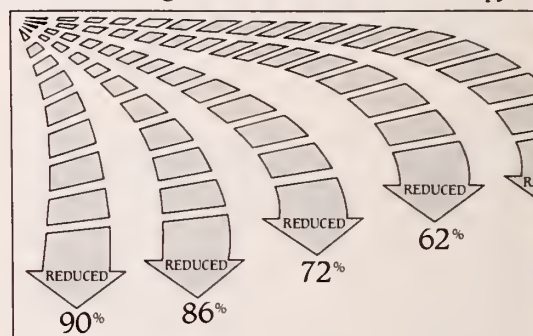
See Improvement In The First Week...¹

And The Weeks That Follow

- ➔ 74% of patients experienced improved sleep after the first *h.s.* dose¹
- ➔ First-week reduction in somatic symptoms¹

Caution patients about the combined effects of Limbitrol with alcohol or other CNS depressants and about activities requiring complete mental alertness, such as operating machinery or driving a car. In general, limit dosage to the lowest effective amount in elderly patients.

Percentage of Reduction in Individual Somatic Symptoms During First Week of Limbitrol Therapy*



VOMITING NAUSEA HEADACHE ANOREXIA/CONSTIPATION

*Patients often presented with more than one somatic symptom.

Limbitrol[®]

Each tablet contains 5 mg clordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt) ^{IV}

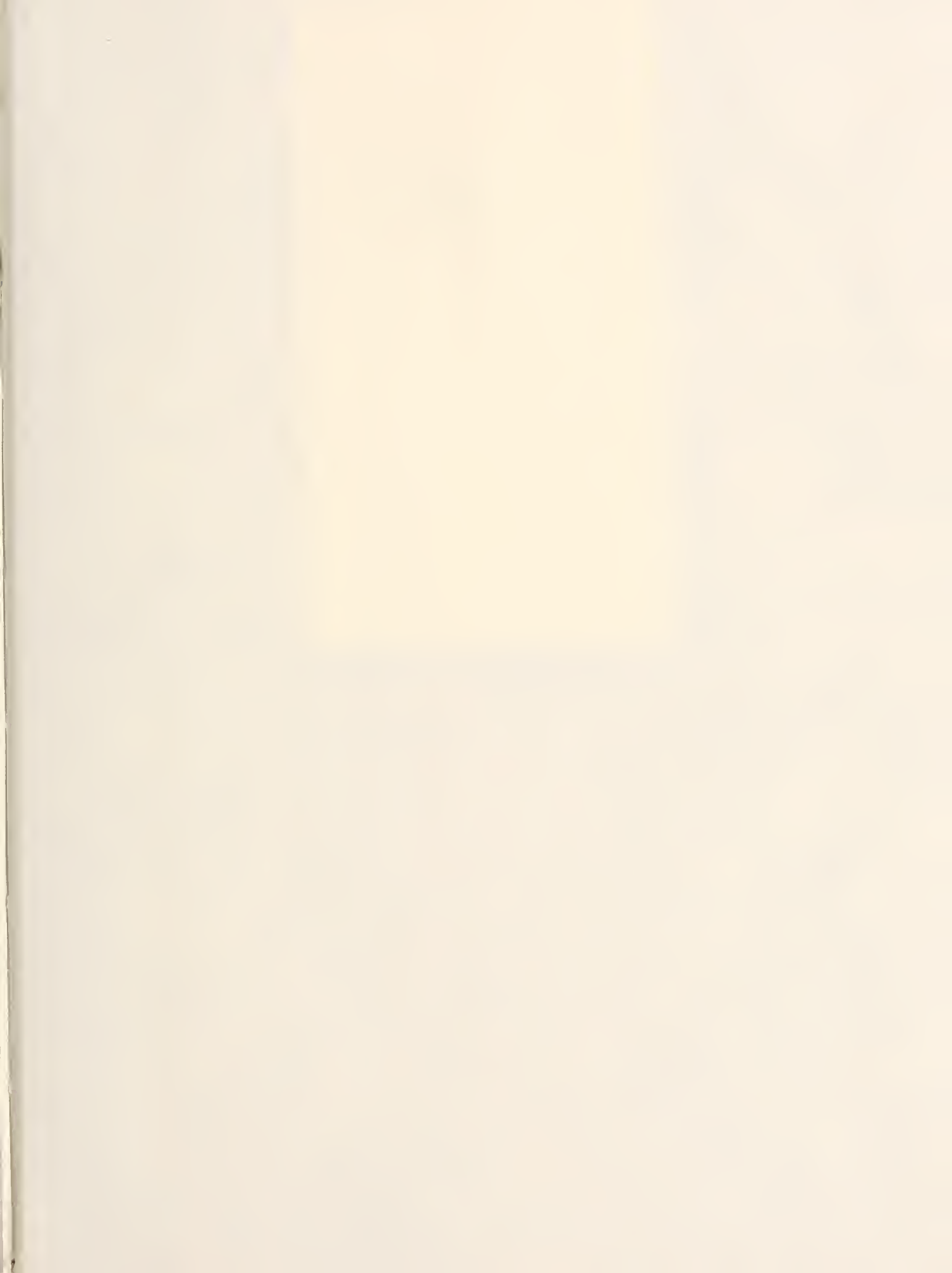
Limbitrol DS[®]

Each tablet contains 10 mg clordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt) ^{IV}

Copyright © 1988 by Roche Products Inc. All rights reserved. Please see summary of product information inside back cover.



N.Y. ACADEMY OF MED
103RD ST
NEW YORK
NY 10029-5207



The New York Academy of Medicine

DUE IN 4 WEEKS UNLESS RENEWED
NOT RENEWABLE AFTER 8 WEEKS

[illegible]

NEW YORK ACADEMY OF MEDICINE



3 0681 0093030 0

